

Proposal Solicitation Package

May 1998

Ecosystem Restoration Projects and Programs

NOTICE:

Public Pre-Submittal Workshop
June 2, 1998
9:30 a.m. - 12:30 p.m.
Sacramento Convention Center
13th & 'L' Street
Sacramento, CA
All potential applicants are encouraged to attend

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Section I Executive Summary



Executive Summary

This May 1998 Proposal Solicitation Package (PSP) of the CALFED Bay-Delta Program (CALFED) is provided for the public to submit proposals for ecosystem restoration programs and projects designed to improve the health of the Bay-Delta ecosystem. The previous June 1997 Request for Proposals (RFP) resulted in 71 individual projects being selected and funded, totaling \$85,378,000.

This May 1998 PSP requests that applicants submit proposals tailored to one of nine specific topics:

- Fish Passage Assessment
- Fish Passage and Related Screen Improvements
- Floodplain Management and Habitat Restoration
- Sediment Management
- Fish Harvest Management Tools
- Species Life History Studies
- Local Watershed Stewardship
- Environmental Education
- Small Screen Evaluations and Alternatives

CALFED has allocated a specific amount of funding for each of these categories. A maximum of \$24,550,000 will be awarded as a result of this solicitation.

Funding for the May 1998 PSP is available from several sources: State Proposition 204, the Federal Bay-Delta Act, and federal watershed funding. While CALFED will coordinate the proposal solicitation, evaluation, and selection process, other CALFED member agencies will prepare and manage individual contracts with the successful applicants, as described further in this package.

Applicants are requested to submit proposals to the CALFED Bay-Delta Program Office, 1416 Ninth Street, Suite 1155, Sacramento, California, 95814. Proposals <u>must</u> be received by the CALFED office no later than **4:00 p.m. on July 2, 1998.** Proposals received after this date and time will be returned unopened. Ten copies of each proposal are to be submitted. Applicants are



strongly encouraged to follow the instructions for proposal format and content which are contained within this package. Failure to follow solicitation instructions could result in rejection of the application or a reduction in scoring.

Any questions regarding this proposal solicitation package must be submitted in writing by 4:00 p.m. on June 1, 1998 to The CALFED Bay-Delta Program, 1416 Ninth Street, Room 1155, Sacramento, CA 95814, E-Mail: publica@water.ca.gov Fax: 654-9780.

In addition, the public may ask questions at the Public Pre-Submittal Workshop to be held on June 2, 1998 from 9:30 to 12:30 at the Sacramento Convention Center, 1400 J Street, Room 203, Sacramento, CA 95814. Shortly after the workshop, CALFED staff will provide a written response to common questions to all parties who have received this proposal solicitation package.



Section II General Information



A. Objectives of the May 1998 Proposal Solicitation Package (PSP)

The CALFED Bay-Delta Program invites proposals for ecosystem restoration programs and projects to improve the health of the Bay-Delta ecosystem. The objective of this May 1998 PSP is to solicit and fund actions which address priority problems in the Bay-Delta ecosystem. For this proposal solicitation, CALFED has identified nine (9) topics where actions are to be funded. The nine topics were established separately to further assess and improve fish passage, restore habitat, conserve land within floodplains, manage sediment in waterways, develop tools to reduce the impact of fish harvest, determine the life history of selected fish species, plan and implement projects on a watershed level, provide restoration-related education, and evaluate alternatives to screening small diversions. Funding provided for this PSP will be directed toward programs and projects within these nine topics which 1) begin to reduce conflicts in the Bay-Delta Ecosystem, 2) focus on high risk species and habitats, and 3) provide broad ecosystem benefits.

Applicants are requested to submit formal proposals for the specific topics, following the instructions and formats contained in this announcement. Proposals <u>must</u> be received at the CALFED Bay-Delta Program office, 1416 Ninth Street, Suite 1155, Sacramento, California, 95814, by **4:00 p.m. on July 2, 1998.** Proposals received after this time will be returned unopened. Timely proposals will then be evaluated using the criteria and process described herein, leading to multiple awards in September 1998.

B. Background on the CALFED Bay-Delta Program

The CALFED Bay-Delta Program is a consortium of State and Federal agencies with management and regulatory responsibilities in the San Francisco Cay/Sacramento-San Joaquin Delta Estuary. The Federal agency members include: U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service, Natural Resources Conservation Service, U.S. Forest Service, Bureau of Land Management, U. S. Geological Survey, the Western Area Power Administration and the U.S. Army Corps of Engineers. The State agency members of CALFED include: California Resources Agency, California Department of Fish and Game, California Department of Water Resources, California Environmental Protection Agency and the State Water Resources Control Board.

The CALFED Bay-Delta Program's mission is to develop a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta system. The Program has four objectives:

Provide good water quality for all beneficial uses



- Improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay-Delta to support sustainable populations of diverse and valuable plant and animal species
- Reduce the mismatch between Bay-Delta water supplies and current and projected beneficial uses dependant on the Bay-Delta system
- Reduce the risk to land use and associated economic activities, water supply, infrastructure, and the ecosystem from catastrophic failure of Delta levees.

The CALFED Bay-Delta Program has prepared a draft Programmatic Environmental Impact Statement/Report (EIS/EIR) that evaluates alternatives to address the above objectives. This document was released to the public in March 1998, and may be obtained by contacting the CALFED Bay-Delta Program toll-free at (800) 900-3587 or (916) 657-2666, or by visiting the CALFED website at: http://calfed.ca.gov. All alternatives contain common programs to address ecosystem health, levee system integrity, water use efficiency, water transfers, water quality and watershed management. The common program to address ecosystem health, consistent with the second CALFED objective above, is described in the Ecosystem Restoration Program Plan (ERPP), which is found as an appendix to the draft Programmatic EIS/EIR.

The goal of the ERPP is to improve and increase aquatic and terrestrial habitats, and to improve ecological functions in the Bay-Delta to support sustainable populations of diverse and valuable plant and animal species. The ERPP is a long-term ecosystem restoration program that will be implemented in phases over several decades, and incorporates the use of adaptive management. Adaptive management is defined here as a process of testing alternative ways of meeting objectives and adjusting future management actions according to what is learned. Applicants desiring additional information on the ERPP or the CALFED Bay Delta Program can contact the Program at (800) 900-3587 or (916) 657-2666, or by visiting the CALFED website at: http://calfed.ca.gov

The CALFED Restoration Coordination Program is designed as a short-term program to begin implementation of ecosystem restoration actions while the draft Programmatic EIS/EIR is awaiting final approval. Once the CALFED member agencies select a preferred alternative based on the final Programmatic EIS/EIR, it is expected that the Ecosystem Restoration Coordination Program will become part of the overall ERPP.

C. Background on Category III and Projects Funded to Date

The December 15, 1994, Bay-Delta Accord included a commitment to develop and fund non-flow related ecosystem restoration activities to improve the health of the Bay-Delta ecosystem. This funding source and commitment is commonly referred to as Category III. The Category III Steering Committee was formed to administer previous rounds of Category III funding. In 1995 and 1996 the Category III Steering Committee approved 38 restoration projects, including land acquisition, fish screens, fish ladders, habitat restoration, and focused research designed to



improve future restoration efforts. Members of the California Urban Water Agencies contributed \$21.7 million to fund these restoration projects. Information on previously approved projects is available from the Metropolitan Water District of Southern California at (916) 650-2600.

The passage of Proposition 204 in 1996 provided an additional \$60 million from State bond funds for Category III purposes. The Federal Bay-Delta Act also provided \$85 million in federal funds for fiscal year 1998 for financial assistance programs that promote ecosystem restoration purposes.

The administration function for Category III funds was shifted to the CALFED Bay-Delta Program's Restoration Coordination Program, which receives input from the Ecosystem Roundtable, the Bay-Delta Advisory Council and the general public. The Restoration Coordination Program also has the responsibility of improving coordination among fish and wildlife restoration programs in the Central Valley. The administration function was assigned to CALFED to ensure that Category III programs and projects were well integrated with other restoration programs and were consistent with the long-term Ecosystem Restoration Program Plan (ERPP).

In June 1997, CALFED released a Request for Proposals (RFP) for ecosystem restoration projects designed to improve the health of the Bay-Delta system. Over 300 proposals were submitted, and in December 1997, CALFED announced that 50 proposals had been awarded over \$60 million in funds. These funds came from four sources: state Proposition 204, Federal Bay-Delta Act, FY 98 EPA Watershed funding, and contributions from the California Urban Water Agencies.

The next ecosystem restoration funding cycle began in early 1998, when CALFED began planning how to allocate approximately \$85 million. The majority of the funds are from the Federal Bay-Delta Act, with additional contributions from state Proposition 204 and FY 98 Watershed funds. As a first step, CALFED announced the funding of 21 proposals which had been submitted through the 1997 RFP process, but for which there were insufficient funds at that time. CALFED allocated approximately \$24 million to these proposals.

The Ecosystem Restoration Program's technical advisors for the 1997 RFP, known as the Integration Panel, then recommended funding specific types of restoration work with the remainder of the \$61 million. This solicitation package requests proposals for projects within nine of the specific topics, as described in Section II.E.

In addition to the topics in this Proposal Solicitation Package, there are other program recommendations that are still being developed and there may be opportunities for interested applicants to compete in these areas in the future. The program topics still being developed include habitat restoration planning for the flood control bypasses, prevention and control of exotic species, and assessment of the impacts of contaminants in the Bay-Delta system. In



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addition, funding has been provided for the Natural Resources Conservation Service's small screen program to fund the construction of screens at small diversions throughout the system.

D. How to Use This Proposal Solicitation Package

Executive Summary

Section I of this solicitation package is the Executive Summary and provides a general overview of the package and information on how to submit proposals.

General Information

Section II of this solicitation package contains information that pertains to all applicants, regardless of the specific topic or funding source. Potential applicants are urged to carefully review this section to understand the proposal evaluation/selection process, required proposal format and content, who may apply for funding, the geographic scope limitation for projects, conflict of interest information, the minimum requirements for all proposals, and the 1998 funding priorities.

May 1998 Proposal Solicitation Topics

Section III of this solicitation describes the nine topics for which proposals are being solicited. For each topic, information is presented regarding proposal eligibility, additional criteria by which proposals will be evaluated, additional format or content requirements, and specific contract requirements. Each topic has its own maximum funding amount; however, it is possible that the entire amount of funding will not be obligated in this funding cycle.

Each applicant must determine the appropriate topic for which funding is being requested. Therefore, it is incumbent upon the applicant to carefully read the topic descriptions presented in Section III. Upon review of the proposals and providing the proposal meets minimum requirements, CALFED staff may re-direct proposals for review in one or more other topics, or may redirect a proposal to a different topic, if deemed appropriate.

Note: Proposals submitted, but not funded, under the 1997 Category III Request for Proposals (RFP) solicitation as well as Inquiry Proposals <u>must</u> be resubmitted in a format that is responsive to this PSP to receive consideration under this May 1998 PSP.

The applicant may elect to group individual projects together if they have a significant direct connection such that both projects are necessary to achieve the stated ecological benefit (i.e., the purchase of land and the subsequent restoration of that land). If several projects do not have a direct connection, but do have a common basis and/or ecological benefit (i.e., the acquisition of adjacent parcels of land), then it is the applicant's discretion whether to submit the projects as a group or individually. Please note that if grouped projects could be considered separable, then the applicant must clearly delineate each individual project's tasks, costs, deliverables, etc.



Because funding may be provided for only a portion of each submitted project, the applicant should clearly show which tasks are considered inseparable (e.g., if these tasks are omitted then the project cannot proceed at all). When CALFED funds portions of a project, there is no guarantee that the future phases of that project will be funded by CALFED or any other funding source. Future funding will depend on the progress of the project, the nature and extent of proposals competing at that time, ecological priorities, and the availability of funds.

If cost sharing is anticipated, but the sources have not yet committed the funding, then the proposal should indicate the status and timing of the anticipated commitment.

Projects can be multi-year efforts if needed and appropriate. However, funds must be expended by a contractor no more than three years after execution of a contract.

Applicants who wish to collaborate on a project may elect to use a contractor-subcontractor relationship or a joint venture partnership. For either case, the CALFED contracting entity will execute a contract with only one applicant. The proposal needs to clearly indicate which applicant will sign the contract and the nature of the agreement between the other applicants, as discussed below.

The subcontractor relationship approach requires that the proposal discuss the nature of the relationship, and if appropriate, the justification for not using the competitive bidding process to select subcontractors. Specific subcontractors do not necessarily need to be listed in the proposal, except to highlight the qualifications of the proposed team for evaluation by the Technical Review Panel. Some subcontractors may not be known until after the proposal has been awarded, and a subcontract has been put out for bid. The estimated costs for subcontract work, and any necessary overhead for managing subcontractors, must be included in the proposal.

Applicants that are joint venture partnerships must identify one partner as the contracting party responsible for payments, reporting, and accounting. The proposal must include a detailed description of how the partners will operate, including the allocation of decision-making authority and liability. The proposals should identify the tasks to be performed by the different entities and the costs at each task level.

E. May 1998 Proposal Solicitation Topics

This May 1998 Proposal Solicitation Package (PSP) is for ecosystem restoration projects that meet one of the nine topics briefly described below. (Note that a full description of each topic is found in Section III of this document). For each topic, CALFED has set a maximum funding level. While CALFED will coordinate the proposal solicitation, evaluation, and selection process, various CALFED member agencies will prepare and manage individual contracts or cooperative agreements with the successful applicants.



- Fish Passage Assessment. Maximum amount to be awarded: \$500,000. Implementing Agency: the California Resources Agency. Funding Source: State Proposition 204. This topic involves identifying opportunities to improve fish passage through cooperative efforts. This can include identification of small diversion dams which are appropriate for removal, replacement, or consolidation. For specific application information, see Section III.A (page 25).
- Fish Passage and Related Screen Improvements. Maximum amount to be awarded: \$5,750,000. Implementing Agency: U.S. Bureau of Reclamation. Funding Source: Federal Bay-Delta Act. Proposals are being solicited to improve fish passage in areas where high quality habitat will be made accessible to high priority fish species. Projects can include consolidation of diversions, removal of dams, removal of instream obstructions, implementation of "fish friendly" dam operations, construction or rehabilitation of fish screens, and if no other passage solutions can be implemented, construction of ladders. For specific application information, see Section III.B (page 30).
- *Floodplain Management and Habitat Restoration. Maximum amount to be awarded: \$13,850,000. Implementing Agency: U.S. Fish and Wildlife Service. Funding Source: Federal Bay-Delta Act. Three types of projects are being solicited: (a) those that identify land to be acquired, either through fee title or permanent easement, within the floodplains of the major rivers or their tributaries for restoration, (b) habitat restoration and/or creation projects within the floodplain, and (c) habitat restoration demonstration projects in different parts of the watershed. An emphasis will be placed on proposals that benefit the CALFED priority species and habitats (see Section I.J). For specific application information related to applying under this topic, see Section III.C (page 35).
- Sediment Management. Maximum amount to be awarded: \$500,000. Implementing Agency: the California Resources Agency. Funding Source: State Proposition 204. The purpose of this topic is to fund sediment management projects and can include providing matching funds for the Central Valley Project Improvement Act (CVPIA) gravel restoration program. For specific application information, see Section III.D (page 41).
- Fish Harvest Management Tools. Maximum amount to be awarded: \$500,000. Implementing Agency: the California Resources Agency. Funding Source: State Proposition 204. Proposals are being solicited to develop fisheries management tools needed to decrease the effects of commercial and recreational harvest on sensitive stocks while maintaining the important industries supported by fish harvest. For specific application information, see Section III.E (page 46).
- Species Life History Studies. Maximum amount to be awarded: \$600,000. Implementing Agency: the California Resources Agency. Funding Source: State Proposition 204. Successful applicants will propose research programs to identify key habitat needs and



stressors on each life history stage of green sturgeon, steelhead, and spring run chinook salmon, including field data and models. An emphasis will be placed on techniques to use for the restoration of these species. For specific application information, see Section III.F (page 51).

- Local Watershed Stewardship. Maximum amount to be awarded: \$2,300,000. Implementing Agency: U.S. EPA. Funding Source: FY 98 EPA Watershed and Federal Bay-Delta Act funds. Funding will be provided for the development and implementation of watershed plans by new or existing watershed groups. For specific application information related to applying under this topic, see Section III.G (page 55).
- Environmental Education. Maximum amount to be awarded: \$300,000. Implementing Agency: U.S. Bureau of Reclamation/U.S. Forest Service. Funding Source: Federal Bay-Delta Act. Funding will be provided for educational programs that increase public awareness, knowledge, and appreciation of natural resources, foster active participation in conservation programs, and encourage individuals to wisely use natural resources. For specific application information, see Section III.H (page 58).
- Small Screen Evaluation and Alternatives. Maximum amount to be awarded: \$200,000. Implementing Agency: the California Resources Agency. Funding Source: State Proposition 204. Proposals are being solicited that focus on development of information that can be used to prioritize efforts to screen small diversions. Proposals are also being solicited to determine if there are techniques, other than positive barrier fish screens, which can significantly reduce entrainment and to evaluate these techniques in an appropriate setting. For specific application information, see Section III.I (page 61).

F. Evaluation/Selection Process and Schedule for Formal Proposals

Proposals will be reviewed using a two-step process. First, panels of technical experts (Technical Review Panels) made up of state, federal and non-agency representatives with the necessary expertise will be formed to evaluate and score proposals submitted under each topic. The panels will use the criteria described in each Topic section to evaluate and score proposals. Scores for each of the criteria will typically range from zero to twenty-five, although criteria may be weighted differently for different topics, as described in Section III. A proposal must receive a score of at least 40 out of a total score of 70 to be eligible for funding in this funding cycle. However, a score above 40 does not automatically ensure funding.

Applicants may be asked to respond in writing to questions to clarify information contained within their proposals.



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The Technical Review Panels will be held to certain conflict of interest rules and requirements as described in Attachment G.

The second part of the evaluation process involves the 1998 Integration Panel, which will be comprised of state and federal agency technical staff and non-agency technical representatives. The Integration Panel may also include individuals involved from other funding sources.

The Integration Panel will evaluate recommendations from the Technical Review Panels for all qualified proposals received and will identify any conflicts or synergy between Technical Review Panel recommendations in the different topic areas, check for duplicate proposals submitted under other topics, identify unmet restoration needs, and assure the overall integrity of the technical review process.

Integration Panel recommendations for funding will be reviewed by the Ecosystem Roundtable and the Bay-Delta Advisory Council. The CALFED member agencies, acting through the CALFED Policy Group, will make final funding recommendations to the implementing agencies. Final approval for funding proposals, however, rests with the implementing agency for each topic area. (See Section II.E)

All funding recommendations will be coordinated with other appropriate funding sources (such as the Central Valley Project Improvement Act (CVPIA)), and programs administered through other agencies (such as the Environmental Protection Agency (EPA) and the State Water Resources Control Board (SWRCB)). Accordingly, the CALFED funding recommendations may identify co-funding or alternative funding options for projects. Proposals not funded through this PSP will be forwarded, as appropriate, to other funding sources for their consideration. Project funding provided through sources other than those listed in this PSP may include additional contract/award terms and conditions.

It is anticipated that funding decisions will be made by September, 1998. Preparation of contracts or cooperative agreements will begin as soon as projects are approved, but due to their complexity it may take considerable time to develop and execute the contracts or cooperative agreements for the successful proposals. Applicants should not commence work on their projects until a funding agreement is executed. Work performed prior to execution of a funding agreement is done at the risk of the applicant and without expectation of reimbursement. Funding agreements are not final until signed by the appropriate contracting agency.

All submitted proposals and evaluation scores become public information and will be available for review after the 1998 Integration Panel completes its review (see Section II.K).

G. Minimum Requirements for Successful Proposals and Applicants

Successful projects and programs must meet the following requirements, where appropriate.



These minimum requirements should be budgeted into each proposal, as necessary. Some of the minimum requirements listed below pertain to issues that applicants must address in their proposals, as described in more detail in Section II.H.

- Consistent with Ecosystem Restoration Program Plan (ERPP) objectives. Successful proposals will be consistent with the CALFED ERPP objectives. The ERPP is a long-term ecosystem restoration program plan that will be implemented in phases over several decades. A copy of the ERPP is contained in the Appendix to the draft Programmatic EIS/EIR. (note: applicants must identify the specific ERPP objectives addressed in their proposal and include the ERPP section, objective, and page number)
- <u>Complies with all applicable laws and regulations, including NEPA/CEQA</u>. Successful proposals must comply with all applicable laws and regulations, including National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). Proposals may include in their budgets funding necessary for compliance with legal and regulatory requirements, as described in Section II.H.
- Does not prejudice the ultimate decision on the CALFED long-term program. CALFED is currently evaluating three basic alternatives, with variations thereof, as part of the Programmatic EIS/EIR process. Programs and projects are not eligible for funding if they are determined to limit the choice of a reasonable range of alternatives, affect the selection of alternatives, or affect the selection of the preferred alternative in the draft Programmatic EIS/EIR as released in March, 1998. If applicants are interested in understanding if their proposal may conflict with any of the alternatives, they may obtain a copy of the draft Programmatic EIS/EIR by calling the CALFED Bay-Delta Program toll free at (800) 900-3587 or (916) 657-2666 and requesting a copy, or by visiting the CALFED web site at: http://calfed.ca.gov. This document is also available at some local libraries. Ecosystem restoration actions that are considered to be common to all the proposed CALFED alternatives are not considered to be prejudicial to the ultimate decision. CALFED staff will review proposals to identify potential conflicts between the proposals and the CALFED alternatives.
- <u>Involves only willing sellers or landowners</u>. Successful proposals that involve actions on private or public lands must provide satisfactory evidence that the landowner is a willing participant in the action. No land will be acquired through condemnation.
- Work commences only when funding agreement signed by agency. Applicants with successful proposals should not commence work on their projects until a funding agreement is signed by the appropriate agency. Work performed by successful applicants prior to execution of a funding agreement is done at the applicant's own risk. Successful applicants should not expect reimbursement of monies spent prior to the execution of a



funding agreement. Due to their complexity, the development of funding agreements may take considerable time.

- Limitations on funding. Successful proposals cannot not use funds to replace existing funding sources for on-going programs, for political advocacy, or for an applicant's litigation costs. Proposals that include projects or programs that are regulatory conditions or mitigation requirements for a prior project will be evaluated on a case-by-case basis.
- Cost Sharing. It is anticipated that many proposals will contain provisions for cost sharing. However, if the successful applicant fails to secure the cost share funds identified in the proposal, and as a result has insufficient funds to complete the project, the contracting agency has the option to amend or terminate the award.

Successful applicants will be expected to comply with the following requirements.

- Program review presentations. Successful applicants may be required to make oral presentations at annual review meetings. The purpose of the meetings is to effectively monitor the progress and utility of the projects, and to share information among all the CALFED contract recipients.
- Quarterly reporting. Successful applicants will be required to submit quarterly reports due by the 10th day of the month following the end of each quarter. It is anticipated that the following information will be required: the amount invoiced to the contracting agency, the amount invoiced to cost share partners, a description of activities performed during the quarter, the percentage of each task completed, the deliverables produced, problems and delays encountered, and a description of any amendments or modifications to the contract.
- Final reporting. Successful applicants are required to submit final reports at the end of their projects.
- Biological monitoring. To ensure coordination of ecological and biological monitoring, CALFED will require successful applicants to complete ecological and biological monitoring plans where necessary. Some proposals may not require ecological and biological monitoring due to the nature of the proposal (e.g., Species Life History). For proposals in which restoration activities are being implemented, the ecological and biological monitoring plan must be submitted, reviewed, and approved by CALFED before any monitoring takes place. Proposals which contain only planning activities are to add a task for the development of an ecological and biological monitoring plan to be used in future implementation activities.

At a minimum, the Ecological and Biological Monitoring Plan shall include the following items: objectives of the monitoring, questions to be addressed through



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monitoring; personnel conducting the monitoring and their related experience; duration of the monitoring; constituents to be monitored; sampling method; locations and frequency of measurement; and reporting formats. In addition, the Ecological and Biological Monitoring Plan shall incorporate a Quality Assurance Project Plan (QAPP) which shall include the number and type of quality control samples; preservation, storage, and analytical techniques; and data synthesis and analysis. Whenever possible, standard methods shall be incorporated and referenced in the plans.

The successful applicant shall submit annual monitoring reports presenting findings and addressing whether the monitoring objectives have been achieved. Data shall be available in electronic format and shall be available for transfer to a storage system of CALFED's choice.

H. Formal Proposal Format and Content

The following format and, as applicable, content requirements should be adhered to in order for proposals to be considered responsive to this PSP. Other information should be provided if the proponent believes that it is necessary to address the evaluation criteria shown in the Topic sections. Page limitations for each section are shown and should not be exceeded. Brief, concise yet thorough proposals under the page limitations are encouraged. The proposal submittal should be on 8 ½ x 11 size paper, with black and white text (no smaller than 12 point) and tables/graphics with text no smaller than 10 point. Submit maps, figures and/or photos as necessary to describe the complete context of the proposal. The maps, figures, and/or photos may be submitted in color but as a minimum are required to be reproducible via a black & white copier. The proposals should be stapled on the upper left hand corner.

Successful applicants will be funded from State Proposition 204 bond funds, Federal Bay-Delta Act funds or FY 98 EPA Watershed funds. Applicants for State Proposition 204 bond funds and Federal Bay-Delta Act funds will be required to comply with standard terms as described in Attachments D and E, depending on funding source. Attachment D includes standard terms for projects funded by the State. Attachment E includes standard forms for projects funded by the Department of Interior. Standard forms for projects funded by the Environmental Protection Agency can be obtained by contacting EPA at (415) 744-1990.

Specific contract requirements are discussed in each Topic section under Section (4) - Contract Requirements. Proponents should carefully read Section (4) of their selected Topic(s) to assure they can meet the applicable contract requirements.

Proposals should include, as a minimum, the following information:

I. Cover page indicating Topic for which proposal is being submitted, summary information, and certification (see Attachment H).



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II. Executive Summary (no more than 2 pages)

- a. Project Title and Applicant Name
- b. Project Description and Primary Biological/Ecological Objectives
- c. Approach/Tasks/Schedule
- d. Justification for Project and Funding by CALFED
- e. Budget Costs and Third Party Impacts
- f. Applicant Qualifications
- g. Monitoring and Data Evaluation
- h. Local Support/Coordination with other Programs/ Compatibility with CALFED objectives

III. Title Page (1 page)

- a. Title of Project
- b. Name of applicant/principle investigator(s); address; phone/fax/E-mail; organizational, institutional or corporate affiliations of applicant/principle investigator(s)
- c. Type of Organization and Tax Status
- d. Tax Identification Number and/or Contractor license, as applicable
- e. Participants/Collaborators in Implementation

IV. Project Description (no more than 6 pages plus maps and/or figures)

a. Project Description and Approach

Thoroughly describe the features and extent of the proposed project and the intended approach to complete the project.

b. Proposed Scope of Work

Identify each incremental phase of the project. Identify the specific tasks needed to conduct/implement actions for the project phase(s) being proposed for funding. For each specific task or subtask, identify the work to be completed, the schedule, budget, and deliverable. Clearly identify which tasks are considered to be inseparable if only a portion of the project were to be funded.

c. Location and/or Geographic Boundaries of the Project

Identify the County and Watershed to which the project applies. Use maps as appropriate.



d. Expected Benefit(s)

Identify the primary stressors, species, and/or habitats (refer to Section L and Attachments B and C) which are the focus of the project. Identify and, to the extent possible, quantify the expected benefits. Distinguish primary benefits from secondary benefits. Identify potential benefits to third parties, other ecosystem restoration programs, and CALFED non-ecosystem objectives.

e. Background and Ecological/Biological/Technical Justification

Discuss the need for the project (e.g., existing conditions) and a comparison of proposed approach with alternative and other similar approaches to achieve comparable objective(s). Summarize the basis for expected benefit(s). Describe how the project meets ERPP objectives and list the specific target(s) met by the proposal note: applicants should identify the specific ERPP objectives addressed in their proposal and include the ERPP section, objective, and page number. Describe how the project addresses the objectives of the Anadromous Fish Restoration Program (AFRP) or other sections of the CVPIA. Discuss nature of and basis for durability of the benefit(s) resulting from implementation of the proposed project (e.g., sensitivity to hydrologic/climatic changes; enhanced ecosystem function/processes). Summarize the current status of the project: Is it a new or continuing project; what is the progress, accomplishments, or expenditures to date; discuss the project's past interaction with other programs/projects; identify the status of supporting documentation.

f. Monitoring and Data Evaluation

Discuss the nature and extent of monitoring and data evaluation, and provide a comparison of the proposed monitoring/data evaluation approach with alternative and other similar approaches. Discuss the potential for or planned coordination and integration of monitoring/data evaluation with other programs. Address how the proposed project will use peer review in the monitoring and data evaluation process. note: Applicants should carefully review monitoring requirements identified in Section II.G.

g. Implementability

Discuss issues such as: Compliance with laws and regulations; the nature and status of environmental review documents under CEQA or NEPA permits, easements, encumbrances, environmental compliance, etc; required coordination with other projects; sensitivity to hydrologic/climatic conditions; the nature and extent of local support (the proposal should either state the level and nature of local support, if known, or indicate



how the applicant intends to seek and obtain local support and should include available documentation of local support), outreach efforts, and participation; cultural impacts; etc.

V. Costs and Schedule to Implement Proposed Project (no more than 2 pages plus tables and/or figures)

a. Budget Costs

Identify budgeted costs for the program in total and specific to each of the tasks or subtasks for which you are requesting funding. Specify the breakdown of costs and funding source for each task using the following categories: Direct salary and benefit costs; Indirect overhead labor costs (General, administrative and fee), if any; Costs of service contracts; Costs of material/acquisition contracts; and miscellaneous and other direct costs. An example table for displaying cost breakdown is shown below in Table 1. Separate O&M costs out by phase/task of the project. Discuss the basis/need for CALFED funding to support the project, and the potential for incremental CALFED funding for distinct project phases. Identify contingency planning for anticipated current year and future year funding needs, especially cost sharing and O&M. Identify funding partnership needs and/or commitments, and specify the source of partnership funding (CVPIA, etc.) and status of that funding. Identify subcontract bid and evaluation process.

Table 1 - Example Cost Breakdown Table

Project Phase and Task	Direct Labor Hours	Direct Salary and Benefits	Overhead Labor (General, Admin. and fee)	Service Contracts	Material and Acquisition Contracts	Miscellaneous and other Direct Costs	Total Cost
Task 1 Subtask A Subtask B				,			
Task 2 etc							

^{(* -} Also indicate the source of funding for this Phase/Task and whether it is for O&M costs)



b. Schedule Milestones

Identify the start/completion dates of specific tasks discussed above plus other key milestones (decisions, testing, etc.). Also identify how payments would relate to milestones, as applicable.

c. Third Party Impacts

Identify and quantify any anticipated or potential third party impacts that would result from implementation of this project, and associated mitigation measures. Examples include economic impacts to a community from land use changes, or reduced hydroelectric generation revenues due to changes in water release patterns in a river.

VI. Applicant Qualifications (no more than 3 pages, including tables)

Describe the planned organization of staff and other resources to be used in implementing this project. Identify the nature and extent of other collaborating participants in the implementation of this project. Identify specific individual responsibilities covering technical, administrative and project management roles. Provide brief biosketches which identify the individual's qualifications as well as experience and performance on past related projects consistent with their proposed roles and responsibility (note: it is not necessary to provide letters of reference for similar projects). Disclose and discuss any potential conflicts of interest. If the applicant is an entity or organization, the applicant's signature on the cover sheet (Attachment H) certifies that the individual signing the application is authorized to do so on behalf of the organization or entity.

VII. Compliance with standard terms and conditions (no more than 1 page plus forms)

Submit the forms consistent with applicant type and with PSP project group type applicable to the proposal. Are the terms and conditions agreeable to and able to be complied with by the applicant? If not, specify those terms and conditions in which deviation is being requested. Example contractual terms and conditions for successful proposals are discussed in Section 4 of each topic. All applicants for federal funds from the Department of Interior must include a completed Form DI-2010 with their proposal (see Attachment E).

I. Who may apply

Any private or public party with an interest in ecosystem restoration may apply. This includes, but is not limited to, State and Federal agencies, special districts, local government entities, universities, resource conservation districts, non-profit organizations, individuals, public/private joint ventures, and other organizations with an interest in ecosystem restoration. For the purposes



of this PSP, we have designated seven types of applicant categories: (1) State agencies, (2) Universities, (3) Federal agencies, (4) Non-profit organizations, (5) Private (for profit) individual entities, (6) Local Government/Districts, and (7) Public/non-profit joint ventures. Applicants must indicate the category type on the proposal cover sheet (see Attachment H). Proposal and contract requirements may vary depending on the topic area and the implementing agency.

J. Geographic Scope

Projects and programs must be within the CALFED Ecosystem Restoration Program Plan (ERPP) study area, which includes the Bay-Delta and its tributary watersheds (See map in Attachment A). As stated in the Implementation Strategy for 1998 (Attachment B) and as identified on the Attachment A map, this proposal solicitation package will emphasize projects and programs in the lower watershed areas, the Delta, and the North San Francisco Bay. Projects and programs in the upper watersheds, South San Francisco Bay, and Central San Francisco Bay will be considered for funding if the applicant can demonstrate a direct benefit to the CALFED priority species and habitats. Applicants under the Local Watershed Stewardship topic (see Section III-G) are encouraged, but not required, to directly address the priority species and habitats. Proposals for projects outside of the geographic scope of the ERPP study area will not be considered for funding, with the possible exception of the Trinity River watershed. Although not within the ERPP study area, the Trinity River watershed may be considered for funding if the applicant can demonstrate a direct benefit to the ERPP study area and the priority species.

K. Conflict of Interest and Confidentiality

All applicants are subject to State and Federal conflict of interest laws. Failure to comply with these laws, including business and financial disclosure provisions, will result in the proposal being rejected and any subsequent contract being declared void. Other legal action may also be taken. Accordingly, before submitting a proposal, applicants are urged to seek legal counsel regarding potential conflict of interest concerns that they may have and requirements for disclosure. Applicable statutes include, but are not limited to, Government Code Section 1090, and Public Contract Code 10410 and 10411 for State conflict of interest requirements.

Applicants should take notice that their submission of a proposal will waive their rights to the confidentiality of that proposal. As explained in Section II.F, Evaluation/Selection Process and Schedule for Formal Proposals, each proposal will be reviewed by a Technical Review Panel and the 1998 Integration Panel. Upon completion of the Integration Panel's review, all proposals will be made available for public review by the Ecosystem Roundtable and the Bay-Delta Advisory Council. The Technical Review Panel's scoring will also become available to the public. Due to the legally mandated public disclosure requirements of these two entities, any proposal may be reviewed and discussed by members of the public. This public participation in the proposal selection process arises, in part, out of representations regarding public participation made to Congress when it was asked to appropriate federal funds for these programs. When the



proposal application is signed, the signer will waive his or her privacy rights as well as other confidentiality protections afforded by law to the proposing entity.

Applicants should also be aware that certain state or federal agencies may submit proposals that will compete against their proposal, and employees of those agencies may sit on the technical and/or integration panels that review and recommend which proposals to accept and fund. (See Attachment G for conflict of interest requirements for Technical Review Panels).

L. 1998 Category III Funding Priorities

1. Near-Term Implementation Strategy.

To guide allocation of CALFED funding in 1997 and 1998, a Near-Term Implementation Strategy was developed by CALFED with input from the Ecosystem Roundtable, a subcommittee of the Bay-Delta Advisory Committee. The purpose of the Near-Term Implementation Strategy is to provide guidance for funding of Near-Term Implementation activities for 1998. A complete copy of the Near-Term Implementation Strategy is available upon request from the CALFED Bay-Delta Program office at (800) 900-3587 or (916) 657-2666, or can be found on the CALFED web site at: http://calfed.ca.gov

The Near-Term Implementation Strategy identifies priority species and habitats based on the following criteria:

- <u>CALFED Mission.</u> Focus on species and habitats whose restoration will result in the greatest progress towards achieving the CALFED mission to restore ecological health and improve water management for beneficial uses of the Bay-Delta system. Aquatic species and those habitats supporting aquatic species are priorities based on this criteria because the major issue in the Bay-Delta that led to the creation of CALFED centered on the conflicts between fisheries and water management.
- <u>High Risk</u>. Focus on species and habitats that have experienced the greatest declines.
- <u>Ecosystem Benefits</u>. Focus on habitats that provide the broadest benefits to priority species and to the ecosystem.

The priority habitats and species for the 1998 funding cycle as defined in the Near-Term Implementation Strategy are listed below. Further detail of these priority habitats and species are provided in Attachment B.



Priority Habitats

- Tidal perennial aquatic habitat (freshwater)
- Seasonal wetland and aquatic habitat
- Instream aquatic habitat
- Shaded riverine aquatic habitat
- Saline emergent wetlands habitat (tidal)
- Midchannel islands and shoal habitat
- North Delta agricultural wetlands and perennial grasslands.

Priority Species

Primary

1st Tier: Winter-run chinook salmon, spring-run chinook salmon, San Joaquin and eastside Delta tributary fall-run chinook salmon, steelhead trout, delta smelt, green sturgeon, and Sacramento late fall-run chinook salmon.

2nd Tier: Longfin smelt, splittail, and white sturgeon

Secondary

Striped bass, migratory birds, Sacramento fall-run chinook salmon, and American shad.

2. Identification of Stressors.

CALFED convened technical teams to obtain geographically focused input to identify the primary problems ("stressors") contributing to the decline of the priority species and habitats. The technical teams identified and prioritized stressors and identified types of actions which would address the stressors. There were five separate technical team workshops covering the following areas:

- Sacramento River and Tributaries
- San Joaquin River and Tributaries
- Delta, Suisun Marsh, and East-side Tributaries
- North Bay
- Lower American River

Additional input was obtained from technical experts on water quality and seasonal wetlands. Individual reports presenting the technical team results are available at the CALFED Bay-Delta Program office. The stressors identified by the technical teams were consolidated by CALFED staff into categories and subcategories. Attachment C summarizes each stressor subcategory, the



linkages to other stressors, and the general types of actions that would address the stressor. Attachment C also identifies the relative priority of each stressor for the priority species.

M. Proposal Completion Checklist

Once the applicant has prepared a proposal, CALFED staff suggest reviewing the following checklist to ensure that the proposal meets the requirements of this solicitation package and can be clearly understood by the technical review panels.

- Has the standard cover sheet (Appendix H) been completed and attached to the front of the proposal?
- Is the proposal being submitted to the most appropriate of the nine topics?
- Is the problem addressed by the proposal described clearly?
- Are the objectives of the proposal described clearly?
- Describe how the project meets ERPP objectives and list the specific target(s) met by the proposal note: applicants should identify the specific ERPP objectives addressed in their proposal and include the ERPP section, objective, and page number. Describe how the project addresses the objectives of the Anadromous Fish Restoration Program (AFRP) or other sections of the CVPIA.
- Does the proposal show a clear link to the CALFED priority species and habitats?
- Does the proposal clearly lay out tasks, products, and timelines?
- Does the proposal contain a budget for each task?
- Have the Minimum Requirements (Section II.G) been addressed?
- Have the page limitations for each section of the proposal been adhered to?



Section III

May 1998 Proposal Solicitation Topics



A. Fish Passage Assessment

1. Description

Background: In many areas, high quality aquatic habitat exists upstream of small agricultural or power diversions on tributaries of the Sacramento and San Joaquin Rivers. These diversion structures and dams block fish passage, can adversely impact downstream migration, and can alter flow patterns. They can restrict natural sediment transport processes, which can result in downstream channel incision and other adverse geomorphological changes. Although some diversions include fish passage facilities, these are not always effective and do not address sediment transport issues.

Removal of these diversion dams can provide unimpeded fish passage to upstream anadromous fish habitat and can improve downstream migration conditions for juveniles. Natural sediment transport can also resume. In addition to removal of dams, there may be other alternatives such as consolidation of existing structures that can reduce the number of fish passage facilities needed and may provide more ecological benefits than retaining all structures with traditional fish ladder and screening solutions.

In addition to fish passage problems at diversion dams, there are some areas where changes to the stream channel have caused fish passage concerns. Opportunities exist to reduce fish migration delays, stranding and straying resulting from these fish passage problems through mechanical manipulation coupled with instream flow management.

Eligible Proposals: Proposals are being solicited to assess fish passage problems and associated problems with migration delays, stranding, and straying and to identify solutions. The assessment of problems and identification of solutions can be accomplished through cooperative efforts to conduct the assessments necessary to identify small diversion dams which are appropriate for removal or consolidation and small diversion dams which need to be replaced or modified with fish-friendly structures. Cooperative efforts can include developing expert work groups to work with local efforts and programs. Proposals can address the entire Bay-Delta watershed or can concentrate on smaller areas within the geographic area of consideration (see Geographic Area). In evaluating a structure, there should be some assessment of cost-effectiveness, ecological considerations such as the type of upstream habitat, and other factors such as water conservation and non-structural flood management.

note: Proposals which include actual construction of fish passage facilities or structures should be submitted under Topic III.B - Fish Passage Improvements.



Geographic Area: (see Section II.L - Geographic Scope)

Available Funding: It is expected that up to \$500,000 in state funding will be available for this topic, however, it is possible that not all of this funding will be obligated this funding cycle.

Coordination: Proposals should include coordination with representatives from agencies such as Army Corp of Engineers (ACOE), Bureau of Reclamation (BOR), Department of Fish & Game (DFG), Fish & Wildlife Service (FWS), and National Marine Fisheries Service (NMFS), environmental groups, local watershed groups, irrigation districts, power companies, dam operators, and dam owners, as appropriate.

2. Criteria for Formal Proposal Evaluation

To be eligible for funding all proposals must benefit one or more of the priority species or habitats listed in Section II-L. Formal proposals which meet the minimum requirements shall be evaluated using the following criteria:

- a. Ecological and biological benefits (25 points)
- b. Applicant's ability (5 points)
- c. Technical feasibility and timing (15 points)
- d. Compatibility and benefits to non-ecosystem CALFED objectives (5 points)
- e. Cost (10 points)
- f. Cost sharing and local involvement (5 points)
- g. Monitoring, assessment, and reporting (5 points)

note: Cost sharing and local involvement are not mandatory requirements, but are encouraged.

For each of the aforementioned criteria, the considerations are as follows:

a. Ecological/Biological Benefits (25 Points)

- What is the ecological and biological effectiveness of the proposal in addressing fish passage and other stressors and benefiting priority species or habitats?
- How does the project meet ERPP objectives and list the specific target(s) met by the
 proposal (note: applicants should identify the specific ERPP objectives addressed
 in their proposal and include the ERPP section, objective, and page number).
 How does the project address the objectives of the Anadromous Fish Restoration
 Program (AFRP) or other sections of the CVPIA.



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- Are there multiple benefits to species, habitats or natural processes? Are multiple stressors addressed?
- To what extent does the proposal use natural processes and functions as a means of restoration?
- Does the proposal include evaluation of a range of fish passage solutions?
- Is the proposal expected to provide long-term ecological/biological benefits?
- b. Applicant's Ability: applicant's capabilities, experience, and record of past performance as well as experience and qualifications of key personnel (5 Points)
- Does the applicant's experience, education, or background indicate that he/she is capable of implementing the proposal?
- If the applicant has received grants or contracts previously, what is the applicant's past record of performance in meeting the objectives and conditions of those grants and contracts?
- c. Technical Feasibility and Timing (15 Points)
- Is the proposal sound in its technical approach, including but not limited to hydrological modeling where appropriate?
- Have all reasonable options been evaluated?
- Does the proposal demonstrate an understanding of the problems?
- Is the proposal ready to be funded or are there actions that the applicant is planning to complete prior to funding?
- d. Compatibility and benefits to non-ecosystem CALFED objectives: water quality, water supply reliability, and system integrity (5 Points)
- Does the proposal have multiple benefits related to the other CALFED objectives?
- Are there conflicts with other CALFED objectives?



• Does the project have the potential for significant adverse or beneficial impacts to third parties? Examples include economic impacts to a community from land use changes, or reduced hydroelectric generation revenues due to changes in water release patterns in a river.

e. Cost (10 Points)

- How does the cost of the proposal (including direct and indirect costs) compare to other similar proposals?
- Is the level of funding requested for the proposed activity reasonable? How does the applicant plan to use its resources to maximize cost effectiveness, such as labor, equipment, class of staff used for different items, supplies?
- Does the proposal include indirect overhead costs? If so are they reasonable? note: The proposal must indicate the level of indirect overhead costs for each task of the proposed project. Indirect overhead labor costs should include general, administrative, and/or fee costs, if any.

f. Cost Sharing and Local Involvement (5 Points)

- Is the applicant sharing in the cost of the project?
- Are other entities sharing in the cost of the project?
- Does the proposal "leverage" other funding sources to support this or other restoration actions?
- When in-kind services are proposed for cost sharing, does the proposal include a method of documenting in-kind services?
- Is the proposal coordinated with other restoration programs and projects in the area?
- Is there local support or involvement for the proposal? note: The proposal should either state the level and nature of local support, if known, or indicate how the applicant intends to seek and obtain local support.
- Is there evidence of local support (examples could include letters or resolutions of support)?
- Is the proposal supported by a local watershed management plan?



- Are all affected dam owners/operators, irrigation districts, power companies, etc., supportive of the proposal?
- Does the project have potential for significant local benefits or impacts including activities related to flood control, water diversions, local economy, and/or local landowners?
- Does the proposal include coordination with ACOE, BOR, NMFS, FWS, DWR, and DFG?

g. Monitoring, Assessment and Reporting (5 Points)

- Does the proposal provide adequate details and resources for both biological and financial monitoring and reporting?
- Is the biological/ecological monitoring component of the proposal coordinated with existing and/or anticipated monitoring programs?
- Does the proposal have performance measures and indicators to determine biological/ecological success?
- Does the proposal include a discussion to compare the proposed methodology with alternatives to support its approach?

3. Proposal Format and Content: (See Section II.H)

4. Contract Requirements

The terms and conditions which will apply to successful proposals are provided in Attachment D. Note that terms and conditions may vary depending on the type of applicant and the type of project. Also, contract administration may be performed by CALFED or the National Fish and Wildlife Foundation (NFWF), depending on the type of applicant and type of project.

Note also that specific documents should be submitted with the proposal and are identified in Attachment D, Table D-1.



B. Fish Passage and Related Screen Improvements

1. Description

Background: In recent years, fisheries resources have declined in California's Central Valley streams. Fishery declines are associated with a wide variety of factors, including habitat destruction, alteration of in-stream flows, construction of dams, and entrainment into water diversions. In many cases, high quality aquatic habitat exists upstream of agricultural and power diversions on tributaries of the Sacramento and San Joaquin Rivers. These diversion structures and dams block fish passage, can adversely impact downstream migration, and can alter flow patterns. In addition, direct mortality to fisheries resources may occur as a result of unscreened diversions. They can also restrict natural sediment transport processes which can result in channel incision and other adverse geomorphological changes.

Removal of diversion dams and screening of intakes can provide unimpeded fish passage for adults moving up and juveniles moving down. It can provide access to high quality upstream habitat and improve survival during out-migration. In some cases, complete barrier removal may not be possible, but there may be options such as consolidation of existing structures which reduce the number of fish passage facilities and may provide more ecological benefits than the traditional fish ladder and screening solutions at each dam. If removal or consolidation of problematic structures is not possible, fish passage and screening structures may need to be constructed or retrofitted to allow for effective fish migration.

The significance of these stressors on a fish population varies depending on the size, location, type, duration and timing of the diversion. Restoration actions to resolve fisheries problems/stressors identified include fish ladders to reduce entrainment, new fish screens, screen rehabilitation, screen improvements, or alternatives to screening such as consolidation or relocation of diversions.

Eligible Proposals: Proposals are being solicited to fund projects that identify and implement solutions that address fish passage and related screening. Projects can include consolidation of diversions, removal of dams, removal of instream obstructions, implementation of "fish friendly" dam operations, construction or rehabilitation of fish screens directly related to fish passage, construction of ladders if no other passage solution can be implemented, and relocation of a diversion to a less fish-sensitive area.

Geographic Area: (see Section II.L - Geographic Scope)



Available Funding: It is expected that up to \$5,750,000 in federal funding will be available for this topic, however, it is possible that not all of this funding will be obligated this funding cycle.

Coordination: Efforts should be coordinated with entities which own or operate diversions, with local conservancies or watershed groups, and with the state and federal agencies involved in fish passage issues including Department of Fish & Game (DFG), Department of Water Resources (DWR), Bureau of Reclamation (BOR), Fish & Wildlife Services (FWS), National Marine Fisheries Service (NMFS), National Resource Conservation Service (NRCS), and Federal Energy Regulation Commission (FERC).

2. Criteria for Formal Proposal Evaluation

To be eligible for funding all proposals must benefit one or more of the priority species and/or habitats listed in Section II.L. Funding for approved projects will be limited to a 50% cost share. Local involvement is not an absolute requirement, but is encouraged. Formal proposals which meet the minimum requirements shall be evaluated using the following criteria:

- a. Ecological and biological benefits (25 points)
- b. Applicant's ability (5 points)
- c. Technical feasibility and timing (15 points)
- d. Compatibility and benefits to non-ecosystem CALFED objectives (5 points)
- e. Cost (10 points)
- f. Cost sharing and local involvement (5 points)
- g. Monitoring, assessment, and reporting (5 points)

For each of the aforementioned criteria, the considerations are as follows:

- a. Ecological/Biological Benefits: (25 Points)
- Are there multiple benefits to species, habitats or natural processes? Are multiple stressors addressed?
- How does the project meet ERPP objectives and list the specific target(s) met by the
 proposal note: applicants should identify the specific ERPP objectives addressed
 in their proposal and include the ERPP section, objective, and page number.
 How does the project address the objectives of the Anadromous Fish Restoration
 Program (AFRP) or other sections of the CVPIA.



- What is the magnitude of ecological and biological effectiveness of the project? How
 much habitat would be made available to priority species? What are the effected
 priority species associated with this project?
- Will the project promote and restore a natural process of geomorphic characteristics, nutrient dynamics, and production capabilities?
- Has the habitat and/or effected stream miles been designated as critical habitat under ESA?
- Will project implementation potentially remove the need for listing of candidate or other species listed under CESA or ESA, or promote the recovery of listed species?
- Does this project support measures mandated by subsection 3406(b) of the CVPIA restoration efforts?
- Is the proposal expected to provide long-term ecological/biological benefits?
- b. Applicant's Ability: applicant's capabilities, experience, and record of past performance as well as experience and qualifications of key personnel (5 Points)
- Does the applicant's experience, education, or background indicate that he/she is capable of implementing the proposal?
- Does the project's key personnel possess the experience, education, or background indicating the ability to implement the proposal?
- If the applicant has received grants or contracts previously, what is the applicant's past record of performance in meeting the objectives and conditions of those grants and contracts?
- c. Technical Feasibility and Timing (15 Points)
- Is the proposal technically feasible and constructible? Has numerical or physical modeling been initiated to determine the project's feasibility?
- Are there windows of opportunity or other constraints that should be considered in the prioritization process?



- Have all reasonable alternatives been evaluated including the ramifications of implementing the alternatives?
- Is the proposal ready to be funded or are there actions that the applicant is planning to complete prior to funding? Will the applicant be able to expend funds immediately upon receipt?
- How will the project perform under drought conditions?
- d. Compatibility and benefits to non-ecosystem CALFED objectives: water quality, water supply reliability, and system integrity (5 Points)
- Does the proposal have multiple benefits related to the other CALFED objectives? If so, what are the multiple benefit and related CALFED objectives?
- Are there conflicts with other CALFED objectives? If so, what are the conflicts and related CALFED objectives?
- Will sedimentation, turbidity, or other aspects of water quality be effected within the project area of influence both presently and in the future?
- Does the project have the potential for significant adverse or beneficial impacts to third parties?
- e. Cost (10 Points)
- How does the cost of the proposal (including direct and indirect costs) compare to other similar proposals?
- How costly will fish passage improvements be relative to the resource benefit received?
- Is the level of funding requested for the proposed activity reasonable? How does applicant plan to use its resources to maximize cost effectiveness, such as labor, equipment, and supplies?
- Does the proposal include overhead costs? If so are they reasonable?
- How will operations and maintenance costs (O&M), if any, be funded?



f. Cost sharing and Local Involvement (5 Points)

- What are the proposed non-federal cost share contributions?
- How is this project related to other fish passage projects within the affected drainage?
- Is there a plan for public notification/outreach which informs local landowners in the area of the proposed project?
- What is the extent of public support? Does the project have potential for significant local benefits or impacts including activities related to flood control, water diversions, local economy, and/or local landowners?

g. Monitoring, Assessment and Reporting (5 Points)

- Does the proposal provide adequate details and include appropriate levels of resources for both biological monitoring and financial reporting?
- Does the biological/ecological monitoring component of the proposal correlate with existing and/or anticipated monitoring programs? Has the monitoring component been approved by appropriate regulatory agencies?
- Does the proposal have performance measures and indicators to determine biological/ecological success?
- Does the proposal include a discussion to compare the proposed monitoring methodology with alternatives to support its approach?
- 3. Proposal Format and Content: (See Section II.H)

4. Contract Requirements

The appropriate federal forms, including terms and conditions, that apply to successful proposals are provided in Attachment E. All proposals must include FORM DI-2010 when submitted.



C. Floodplain Management and Habitat Restoration

1. Description

Background: Encroachment by agricultural and urban development has restricted floodplains, which can lead to reduced riparian habitat and loss of shaded riverine aquatic habitat. In some cases, the landowners in the floodplain also face repeated flooding of their land with the resulting loss of agricultural revenue and loss of property. Opportunities now exist on many rivers which were heavily flooded in January 1997 to expand floodways and riparian corridors in flood-prone areas, thus providing greater flood management flexibility and concurrently benefitting the ecosystem. Many of these timely opportunities have been identified by the US Department of Agriculture (USDA)/National Resource Conservation Service (NRCS), and the Army Corp of Engineers (ACOE) during their response to the January 1997 floods.

Floodplain restoration actions focus on use of natural processes and are not well understood by the public. Since projects such as setback levees, restoration of river channel meanders, and other such efforts require local cooperation and understanding for implementation to be successful, habitat restoration demonstration projects can function as an educational tool for the restoration and/or creation of different habitat types. At the same time, they are an important experimental tool to increase technical understanding of floodplain habitat management and restoration. Demonstration projects can also increase public understanding and acceptance of other types of habitat restoration efforts.

Creation of habitat links directly to CALFED's Ecosystem Restoration Program Plan (ERPP), which contains goals of restoring thousands of acres of wetland and riparian habitat. Restoration demonstration projects would be especially appropriate on streams and rivers where priority species are known to benefit from a particular type of habitat.

Eligible Proposals: Proposals are being solicited to identify and acquire (through fee title or permanent easement) lands within the floodplains of the major rivers of the Central Valley and their tributaries. A particular emphasis will be placed on the lands flooded in January 1997, or other lands in which benefits to flood management can be demonstrated. Areas that can be acquired by permanent conservation easements are preferred over fee title acquisitions, if they meet the relevant ecological objective for floodplain restoration. Funds may also be provided for habitat creation and/or restoration of existing conservation lands within the floodplain.

Proposals are also being solicited that support habitat restoration demonstration projects that benefit priority species in different parts of the watershed. The demonstration



projects must show habitat needs, values, and opportunities for restoration, and must be located in areas which are accessible to the public. The demonstration projects need not be limited to floodplain restoration but may focus on other types of ecosystem restoration. Existing or previously funded restoration projects, including projects approved in the 1997 CALFED Category III process, may apply for demonstration project funding to create or enhance interpretive sites. These efforts should include local landowner cooperation to allow controlled public access to the interpretive site.

Geographic Area: (see Section II.J - Geographic Scope)

Available Funding: It is expected that up to \$13,850,000 in federal funding will be available for this topic, however, it is possible that not all of this funding will be obligated this funding cycle. Note: At least \$2,000,000 will be allocated to habitat restoration demonstration projects.

Coordination: Efforts should be coordinated with USDA/NRCS, State Reclamation Board, ACOE, FWS, DFG, DWR, BOR and other local, state, or federal agencies involved in floodplain management.

Demonstration projects will require coordination between the project proponent and local landowners (especially on adjacent parcels), conservancies, and resource agencies. The project proponent also needs to advertise the educational and interpretive opportunities which will be made available.

2. Criteria for Formal Proposal Evaluation

To be eligible for funding all proposals must benefit one or more of the priority species or habitats listed in Section II-L. Formal proposals which meet the minimum requirements shall be evaluated using the following criteria:

- a. Ecological and biological benefits (25 points)
- b. Applicant's ability (5 points)
- c. Technical feasibility and timing (10 points)
- d. Compatibility and benefits to non-ecosystem CALFED objectives (15 points)
- e. Cost (5 points)
- f. Cost sharing and local involvement (5 points)
- g. Monitoring, assessment, and reporting (5 points)

note: Cost sharing and local involvement are not mandatory requirements, but are encouraged.



For each of the aforementioned criteria, the considerations are as follows:

a. Ecological/Biological Benefits (25 Points)

- What is the ecological and biological effectiveness of the proposal in addressing a stressor and benefiting priority species or habitats?
- Are there multiple benefits to species, habitats or natural processes? Are multiple stressors addressed?
- How does the project meet ERPP objectives and list the specific target(s) met by the
 proposal (note: applicants should identify the specific ERPP objectives addressed
 in their proposal and include the ERPP section, objective, and page number).
 How does the project address the objectives of the Anadromous Fish Restoration
 Program (AFRP) or other sections of the CVPIA.
- To what extent does the proposal use natural processes and functions as a means of restoration?
- Is the proposal expected to provide long-term ecological/biological benefits? For example are there permanent land protections associated with land transactions and habitat restoration proposals? Is there a management plan in place that would assure long-term benefits?
- For demonstration sites, how are the ecological/biological benefits of the project disclosed to the public?
- b. Applicant's Ability: applicant's capabilities, experience, and record of past performance as well as experience and qualifications of key personnel (5 Points)
- Does the applicant's experience, education, or background indicate that he/she is capable of implementing the proposal? Proposals for floodplain and riparian habitat acquisition should also identify a cooperating management entity that will manage the acquisition or easement in perpetuity. Is the management entity also capable of implementing the proposal?
- If the applicant has received grants or contracts previously, what is the applicant's past record of performance in meeting the objectives and conditions of those grants and contracts?



c. Technical Feasibility and Timing (10 Points)

- Is the proposal sound in its technical approach, including but not limited to hydrological modeling where appropriate? Does the proposal include a management plan? Are provisions included to address levee maintenance and funding for levee maintenance, if applicable?
- Does the proposal demonstrate an understanding of the problems?
- Is the proposal ready to be funded or are there actions that the applicant is planning to complete prior to funding? For example, if funding is requested for implementation, have all required permits and design work been completed or is it expected to be completed in time to avoid delays in the project?
- For Floodplain Restoration Projects: Has the proposal adequately demonstrated that restoration provides benefits to floodplain management? Do the benefits involve reduced risk of flood damages at the restoration site or in adjacent or downstream areas?
- For Demonstration Projects: Does the proposal demonstrate that public understanding of floodplain restoration processes will be enhanced? Is there adequate public access to the site?
- d. Compatibility and benefits to non-ecosystem CALFED objectives: water quality, water supply reliability, and system integrity (15 Points)
- For Floodplain Restoration Projects: Has the proposal adequately demonstrated that restoration provides benefits to flood management? Where would flood management benefits occur?
- For Demonstration Projects: Does the proposal demonstrate that public understanding of floodplain restoration processes will be enhanced?
- Does the proposal have multiple benefits related to the other CALFED objectives?
- Are there conflicts with other CALFED objectives?
- Does the project have the potential for significant adverse or beneficial impacts to third parties?



e. Cost (5 Points)

- How does the cost of the proposal (including direct and indirect costs) compare to other similar proposals?
- Is the level of funding requested for the proposed activity reasonable? How does the applicant plan to use its resources to maximize cost effectiveness, such as labor, equipment, class of staff used for different items, supplies?
- Does the proposal include indirect overhead costs? If so are they reasonable?
 note: The proposal must indicate the level of indirect overhead costs for each task of
 the proposed project. Indirect overhead labor costs should include general,
 administrative, and/or fee costs, if any.

f. Cost Sharing and Local Involvement (5 Points)

- Is the applicant sharing in the cost of the project?
- Are other entities sharing in the cost of the project?
- Does the proposal "leverage" other funding sources to support this or other restoration actions?
- Does the proposal include a method of documenting any in-kind services proposed for cost-sharing?
- Is the proposal coordinated with other restoration programs in the area?
- Is the proposal consistent with flood management plans for the area?
- Is there local support or involvement for the proposal? note: The proposal should either state the level and nature of local support, if known, or indicate how the applicant intends to seek and obtain local support.
- Is the proposal supported by a local watershed management plan?
- Is there a plan for public notification/outreach which informs local landowners in the area of the proposed project? If the proposal is for a site specific acquisition or restoration project, have the adjacent landowners been notified of the proposal, and if not what is the plan for notifying adjacent landowners?



- Does the project have potential for significant local benefits or impacts including activities related to flood control, water diversions, local economy, and/or local landowners?
- Does the proposal include coordination with Federal, State and local flood management and fish and wildlife management agencies?
- Does the proposal give preference to permanent conservation easements if they meet the relevant ecological objectives?

g. Monitoring, Assessment and Reporting (5 Points)

- Does the proposal provide adequate details and resources for both biological and financial monitoring and reporting?
- Is the biological/ecological monitoring component of the proposal coordinated with existing and/or anticipated monitoring programs?
- Does the proposal have performance measures and indicators to determine biological/ecological success?
- Does the proposal include a discussion to compare the proposed methodology with alternatives to support its approach?

3. Formal Proposal Format and Content: (See Section II.H)

4. Contract Requirements

The appropriate federal forms, including terms and conditions, that apply to successful proposals are provided in Attachment E. All proposals must include FORM DI-2010 when submitted.

Land acquisition, by fee title or easement, should be appraised using federal standards. Appraisals will be reviewed and approved by the Fish & Wildlife Service (FWS) prior to funding. For further information, contact the FWS at (916) 979-2718.



D. Sediment Management

1. Description

Background: Dams have interrupted the natural alluvial sediment transport processes thus negatively impacting river channel morphology and the aquatic habitat available to native species. In some cases, rivers have responded to this lack of sustainable coarsesediment supply with channel incision and bed-surface coarsening. In other cases, lack of channel-forming flows have allowed increased amounts of fine materials to be deposited. This reduces both the quantity and quality of spawning habitat available to native anadromous fish species and reduces food chain (e.g., benthic macroinvertebrate) production.

In addition, sediment transport continuity has been interrupted in some areas due to the impacts of instream and floodplain aggregate and gold mining. Past mining activities have left large instream and floodplain pits which act as sediment traps during gravel transport events. Gravels slowly accumulate in the pits, and because these gravels are not transported through these reaches, the bed surface downstream coarsens and/or incises.

Eligible Proposals: Proposals are being solicited for projects to manage sediment in areas where natural sediment deposition processes have been interrupted and aquatic habitats have degraded. Projects should be based on an understanding of sediment transport processes in the area of consideration. Proposals can include gravel restoration as part of the sediment management effort.

Geographic Area: (see Section II.J - Geographic Scope)

Available Funding: It is expected that up to \$500,000 in state funding will be available for this topic, however, it is possible that not all of this funding will be obligated this funding cycle.

Coordination: Proposals should be coordinated with State and Federal efforts to implement the CVPIA and other efforts to rehabilitate natural hydrology and sediment transport processes.

2. Criteria for Formal Proposal Evaluation

To be eligible for funding all proposals should benefit one or more of the priority species or habitats listed in Section II-L. Formal proposals which meet the minimum requirements shall be evaluated using the following criteria:



- a. Ecological and biological benefits (25 points)
- b. Applicant's ability (5 points)
- c. Technical feasibility and timing (15 points)
- d. Cost (20 points)
- e. Cost sharing and local involvement (5 points)
- f. Monitoring, assessment, and reporting (5 points)

note: Cost sharing and local involvement are not mandatory requirements, but are encouraged.

For each of the aforementioned criteria, the considerations are as follows:

- a. Ecological/Biological Benefits (25 Points)
- What is the ecological and biological effectiveness of the proposal in addressing a stressor and benefiting priority species or habitats?
- How does the project meet ERPP objectives and list the specific target(s) met by the
 proposal. note: applicants should identify the specific ERPP objectives addressed
 in their proposal and include the ERPP section, objective, and page number.
 How does the project address the objectives of the Anadromous Fish Restoration
 Program (AFRP) or other sections of the CVPIA.
- Are there multiple benefits to species, habitats or natural processes? Are multiple stressors addressed?
- To what extent does the proposal use natural processes and functions as a means of restoration?
- Is the proposal expected to provide long-term ecological/biological benefits? For example are there permanent land protections associated with land transactions and habitat restoration proposals?
- b. Applicant's Ability: applicant's capabilities, experience, and record of past performance as well as experience and qualifications of key personnel (5 Points)
- Does the applicant's experience, education, or background indicate that he/she is capable of implementing the proposal?
- If the applicant has received grants or contracts previously, what is the applicant's past record of performance in meeting the objectives and conditions of those grants and contracts?



c. Technical Feasibility and Timing (15 Points)

- Is the proposal sound in its technical approach, including but not limited to hydrological modeling where appropriate?
- Have all reasonable options been evaluated?
- Does the proposal demonstrate an understanding of the problems?
- Is the proposal ready to be funded or are there actions that the applicant is planning to complete prior funding? For example, if funding is requested for implementation, have all required permits and design work been completed or is it expected to be completed in time to avoid delays in the project?

d. Cost (5 Points)

- How does the cost of the proposal (including direct and indirect costs) compare to other similar proposals?
- Is the level of funding requested for the proposed activity reasonable? How does the applicant plan to use its resources to maximize cost effectiveness, such as labor, equipment, class of staff used for different items, supplies?
- Does the proposal include indirect overhead costs? If so are they reasonable?
 note: The proposal should indicate the level of indirect overhead costs for each task of
 the proposed project. Indirect overhead labor costs should include general,
 administrative, and/or fee costs, if any.

e. Cost Sharing and Local Involvement (5 Points)

- Is the applicant sharing in the cost of the project?
- Are other entities sharing in the cost of the project?
- Does the proposal "leverage" other funding sources to support this or other restoration actions?
- When in-kind services are proposed for cost sharing, does the proposal include a method of documenting in-kind services?
- Is the proposal coordinated with other restoration programs and projects in the area?



- Is there local support or involvement for the proposal? note: The proposal should either state the level and nature of local support, if known, or indicate how the applicant intends to seek and obtain local support.
- Is the proposal supported by a local watershed management plan?
- Is there a plan for public notification/outreach which informs local landowners in the area of the proposed project? If the proposal is for a site specific acquisition or restoration project, have the adjacent landowners been notified of the proposal, and if not what is the plan for notifying adjacent landowners?
- Does the project have potential for significant local benefits or impacts including activities related to flood control, water diversions, local economy, and/or local landowners?
- Does the proposal include coordination with ACOE, BOR, NMFS, FWS, DWR, DFG?

f. Monitoring, Assessment and Reporting (10 Points)

- Does the proposal provide adequate details and resources for both biological and financial monitoring and reporting?
- Is the biological/ecological monitoring component of the proposal coordinated with existing and/or anticipated monitoring programs?
- Does the proposal have performance measures and indicators to determine biological/ecological success?
- Does the proposal include a discussion to compare the proposed methodology with alternatives to support its approach?

3. Formal Proposal Format and Content

Proposals submitted under this topic may apply to one, or both, of two separate contract types, depending on the nature of the proposal/project(s). The two different contract types are:

• Type 1: <u>Public Works/Construction Contracts</u>. Public works/construction projects are defined by Labor Code Sections 1720 et seq., and include construction, alteration, demolition or repair work paid for with public funds. The types of projects that would be considered Public Works/Construction include construction and modification to



major structures such as screens, fish ladders, diversion and conveyance structures, levees, channel form, drainage channels, roads, gravel beds, etc.

• Type 2: <u>Service Contracts</u>: All other projects, such as those addressing planning, non-construction habitat restoration, design activities, educational projects, etc., utilize service contracts.

For the purposes of this topic, the primary difference between the two project types are with contract requirements, as discussed in Section 4 below - Contract Requirements. Otherwise, the majority of the information and guidance in this PSP is common to proposals covering both types of projects (see Section II.H). Note: For this topic, applicants should include project type (i.e., service project vs. public works/construction project) within the Title Page portion of their proposal. If a proposal addresses both of the above project types, then the applicant will need to clearly segregate tasks, implementation processes, deliverables, costs and contract administration procedures for different aspects of their project consistent with the defined project type. It is essential that proponents acknowledge the appropriate project type(s) for their proposal to ensure recognition of contract requirements. Proponents should carefully read Section 4 below to ensure they can meet applicable contract requirements.

4. Contract Requirements

The terms and conditions which will apply to successful proposals are provided in Attachment D. Note that terms and conditions may vary depending on the type of applicant and the type of project. Also, contract administration may be performed by CALFED or the National Fish and Wildlife Foundation (NFWF), depending on the type of applicant and type of project.

Note also that specific documents should be submitted with the proposal and are identified in Attachment D, Table D-1.



Fish Harvest Management Tools

1. Description

Background: There is a need to develop fisheries management tools to better understand the impacts of recreational and commercial harvest on wild anadromous fish stocks where they have experienced severe declines. These tools would not only assist in the recovery of the fish stocks but could help maintain viable commercial and recreational fishing industries by reducing the conflicts.

The harvest of hatchery-produced chinook salmon is constrained by the need to protect the sensitive wild stocks mixed with them. More selective fisheries targeting hatcheryderived fish could result in higher harvests and less mortality of wild stocks. One method that has been suggested to target harvest on hatchery fish has been mass-marking of all hatchery production to allow selective harvest of these fish. However, because wild fish mix with hatchery fish, fishermen are likely to hook wild fish in their pursuit of hatchery fish. If the proportion of a particular run of salmon (e.g., winter run) is very low, individual fish could potentially get hooked repeatedly and suffer mortality as a result. Information related to the estimated hooking mortality in both the commercial fishery and in the freshwater and saltwater recreational fishery is needed to evaluate potential effects of mass-marking. Techniques to minimize hooking mortality can also be effective tools to reduce any effects that may be identified with mass-marking.

Selectivity in salmon fisheries to minimize impacts on sensitive stocks can also be increased in a number of other ways. Some examples are development of better information on locations of sensitive stocks to more effectively target harvest and evaluation of different harvest techniques to determine if they increase selectivity through innovation.

Eligible Proposals: Proposals are being solicited to develop fisheries management tools to decrease the effects of commercial and recreational harvest on sensitive stocks while maintaining the important industries supported by harvest. These tools could use a variety of approaches including research to refine the estimates of harvest impacts on sensitive salmon populations, allow calculation of a harvest rate, or research to estimate hooking mortality of wild salmon stocks as a result of both the commercial and recreational fisheries in marine, estuarine, and freshwater, if hatchery fish were massmarked. The tools could also include refinement to ocean harvest models or genetic analysis. The results can be used to find ways to meet performance standards for commercial and sport salmon fisheries consistent with ecosystem restoration and with sustainable fishery goals (e.g., maximum allowable harvest impact on sensitive stocks such as winter run and spring run chinook salmon). Additional tagging and/or marking is



not contemplated as part of this proposal. Applicants should be familiar with California commercial and recreational fisheries practices.

Geographic Area: (see Section II.J - Geographic Scope) In addition, the geographic area for this topic includes distant fisheries in which salmon originating in the Bay-Delta are caught.

Available Funding: It is expected that up to \$500,000 in state funding will be available for this topic, however, it is possible that not all of this funding will be obligated this funding cycle.

Coordination: Applicants should demonstrate coordination with applicable regulatory agencies (e.g. NMFS, DFG, and Pacific Fisheries Management Council (PFMC)), as well as with commercial and sport fishing industries..

Additional information: Proposals will be evaluated for funding based on the 1998 priority species as listed in Section II.L and on the likelihood of ecological benefit (specifically, increased selectivity and reduced harvest impacts on sensitive stocks).

2. Criteria for Formal Proposal Evaluation

To be eligible for funding all proposals should benefit one or more of the priority species or habitats listed in Section II-L. Formal proposals which meet the minimum requirements shall be evaluated using the following criteria:

- a. Ecological and biological benefits (20 points)
- b. Applicant's ability (25 points)
- c. Technical feasibility and timing (10 points)
- d. Cost (5 points)
- e. Cost sharing and local involvement (5 points)
- f. Monitoring, assessment, and reporting (5 points)

note: Cost sharing and local involvement are not mandatory requirements, but are encouraged.

For each of the aforementioned criteria, the considerations are as follows:

a. Ecological/Biological Benefits (20 Points)

• What is the ecological and biological effectiveness of the proposal in addressing a stressor and benefiting priority species?



- How does the project meet ERPP objectives and list the specific target(s) met by the
 proposal note: applicants should identify the specific ERPP objectives addressed
 in their proposal and include the ERPP section, objective, and page number.
 How does the project address the objectives of the Anadromous Fish Restoration
 Program (AFRP) or other sections of the CVPIA.
- Is the proposal expected to provide long-term ecological/biological benefits?
- b. Applicant's Ability: applicant's capabilities, experience, and record of past performance as well as experience and qualifications of key personnel (25 Points)
- Does the applicant's experience, education, or background indicate that he/she is capable of implementing the proposal?
- If the applicant has received grants or contracts previously, what is the applicant's past record of performance in meeting the objectives and conditions of those grants and contracts?
- Is the applicant familiar with California fisheries management?
- c. Technical Feasibility and Timing (10 Points)
- Is the proposal sound in its technical approach?
- Have all reasonable options been evaluated?
- Does the proposal demonstrate an understanding of the problems?
- Is the proposal ready to be funded or are there actions that the applicant is planning to complete prior funding?

d. Cost (5 Points)

- How does the cost of the proposal (including direct and indirect costs) compare to other similar proposals?
- Is the level of funding requested for the proposed activity reasonable? How does the applicant plan to use its resources to maximize cost effectiveness, such as labor, equipment, class of staff used for different items, supplies?
- Does the proposal include indirect overhead costs? If so are they reasonable? note: The proposal should indicate the level of indirect overhead costs for each task of



the proposed project. Indirect overhead labor costs should include general, administrative, and/or fee costs, if any.

e. Cost Sharing and Local Involvement (5 Points)

- Is the applicant sharing in the cost of the project?
- Are other entities sharing in the cost of the project?
- Does the proposal "leverage" other funding sources?
- When in-kind services are proposed for cost sharing, does the proposal include a method of documenting in-kind services?
- Is the proposal coordinated with other restoration programs and projects in the area?
- Is there local support or involvement for the proposal? note: The proposal should either state the level and nature of local support, if known, or indicate how the applicant intends to seek and obtain local support.
- Does the project have potential for significant local benefits or impacts?
- Does the proposal include coordination with ACOE, BOR, NMFS, FWS, PFMC, DWR, DFG?

f. Monitoring, Assessment and Reporting (5 Points)

- Does the proposal provide adequate details and resources for both biological and financial monitoring and reporting?
- Is the biological/ecological monitoring component of the proposal coordinated with existing and/or anticipated monitoring programs?
- Does the proposal have performance measures and indicators to determine biological/ecological success?
- Does the proposal include a discussion to compare the proposed methodology with alternatives to support its approach?
- 3. Formal Proposal Format and Content: (See Section II.H)



4. Contract Requirements

The terms and conditions which will apply to successful proposals are provided in Attachment D. Note that terms and conditions may vary depending on the type of applicant and the type of project. Also, contract administration may be performed by CALFED or the National Fish and Wildlife Foundation (NFWF), depending on the type of applicant and type of project.

Note also that specific documents should be submitted with the proposal and are identified in Attachment D, Table D-1.



F. Species Life History Studies

1. Description

Background: In order to identify key stressors on populations, additional information is needed regarding the life histories of green sturgeon, steelhead, and spring-run chinook salmon. This information is also necessary before successful restoration programs can be designed or implemented to benefit these species.

Eligible Proposals: Proposals are being solicited to fund research programs to identify key habitat needs and stressors on each life history stage of green sturgeon, steelhead, and spring-run chinook salmon. The research is to include field data and models for the purpose of restoring these species. Specific proposals are requested for each of the three species. Proposals should identify which life history stage is being evaluated and extent of the geographic scope.

Geographic Area: (see Section II.J - Geographic Scope)

Available Funding: It is expected that up to \$600,000 in state funding will be available for this topic, however, it is possible that not all of this funding will be obligated this funding cycle.

Coordination: Proposals should include coordination with on-going research efforts on the species of interest and on other species in the same geographic area.

2. Criteria for Formal Proposal Evaluation

To be eligible for funding all proposals should benefit one or more of the priority species or habitats listed in Section II.L. Formal proposals which meet the minimum requirements shall be evaluated using the following criteria:

- a. Ecological and biological benefits (20 points)
- b. Applicant's ability (20 points)
- c. Technical feasibility and timing (10 points)
- d. Cost (10 points)
- e. Cost sharing and local involvement (5 points)
- f. Monitoring, assessment, and reporting (5 points)

note: sharing and local involvement are not mandatory requirements, but are encouraged.



For each of the aforementioned criteria, the considerations are as follows:

a. Ecological/Biological Benefits (20 Points)

- Will the proposal be effective at identifying the ecological and biological effectiveness of different restoration actions for steelhead, green sturgeon, or spring run chinook salmon?
- Does the proposal also identify habitat restoration needs of other species?
- How does the project meet ERPP objectives and list the specific target(s) met by the
 proposal note: applicants should identify the specific ERPP objectives addressed
 in their proposal and include the ERPP section, objective, and page number.
 How does the project address the objectives of the Anadromous Fish Restoration
 Program (AFRP) or other sections of the CVPIA.
- To what extent does the proposal result in identifying natural processes and functions as a means of restoration for steelhead, green sturgeon, and spring-run chinook salmon?
- Is the proposal expected to provide long-term ecological/biological benefits?
- b. Applicant's Ability: applicant's capabilities, experience, and record of past performance as well as experience and qualifications of key personnel (20 Points)
- Does the applicant's experience, education, or background indicate that he/she is capable of implementing the proposal?
- If the applicant has received grants or contracts previously, what is the applicant's past record of performance in meeting the objectives and conditions of those grants and contracts?
- c. Technical Feasibility and Timing (10 Points)
- Is the proposal sound in its technical approach?
- Have all reasonable options been evaluated?
- Does the proposal demonstrate an understanding of the problems?
- Is the proposal ready to be funded or are there actions that the applicant is planning to complete prior funding?



d. Cost (10 Points)

- How does the cost of the proposal (including direct and indirect costs) compare to other similar proposals?
- Is the level of funding requested for the proposed activity reasonable? How does the applicant plan to use its resources to maximize cost effectiveness, such as labor, equipment, class of staff used for different items, supplies?
- Does the proposal include indirect overhead costs? If so are they reasonable? note: The proposal should indicate the level of indirect overhead costs for each task of the proposed project. Indirect overhead labor costs should include general, administrative, and/or fee costs, if any.

e. Cost Sharing and Local Involvement (5 Points)

- Is the applicant sharing in the cost of the project?
- Are other entities sharing in the cost of the project?
- Does the proposal "leverage" other funding sources to support this or other restoration actions?
- When in-kind services are proposed for cost sharing, does the proposal include a method of documenting in-kind services?
- Is the proposal coordinated with other restoration programs and projects in the area?
- Is there local support or involvement for the proposal? note: The proposal should either state the level and nature of local support, if known, or indicate how the applicant intends to seek and obtain local support.
- Is the proposal supported by a local watershed management plan?

f. Monitoring, Assessment and Reporting (5 Points)

- Does the proposal provide adequate details and resources for both biological and financial monitoring and reporting?
- Is the biological/ecological monitoring in the proposal coordinated with existing and/or anticipated monitoring programs?



- Will the proposal help identify performance measures and indicators to determine biological/ecological success of restoration efforts for the species?
- Does the proposal include a discussion to compare the proposed methodology with alternatives to support its approach?

3. Formal Proposal Format and Content: (See Section II.H)

4. Contract Requirements

The terms and conditions which will apply to successful proposals are provided in Attachment D. Note that terms and conditions may vary depending on the type of applicant and the type of project. Also, contract administration may be performed by CALFED or the National Fish and Wildlife Foundation (NFWF), depending on the type of applicant and type of project.

Note also that specific documents should be submitted with the proposal and are identified in Attachment D, Table D-1.



G. Local Watershed Stewardship

1. Description

Background: CALFED recognizes the importance of watershed stewardship as a component of the Bay/Delta solution, and wants to support watershed projects that are community-based, with active local leadership and the participation of diverse interests. CALFED has allocated funds to support the development and implementation of local watershed plans. Project applicants are expected to be, but are not limited to, Resource Conservation Districts, Watershed Conservancies, Watershed Councils, Coordinated Resource Management Programs, non-profit organizations, local governments, and others. Projects are expected to be, but are not limited to, plan development, watershed assessments, implementation of practices to protect and enhance water quality, riparian and habitat restoration, monitoring, technical assistance, and others.

Eligible Proposals: Proposals will be solicited to fund the development and implementation of watershed plans by new or existing watershed groups for key tributaries of the Central Valley and Bay-Delta watershed. Because CALFED is interested in fostering watershed stewardship throughout the Bay-Delta ecosystem, proposals under this topic are encouraged to address the CALFED priority species and habitats (see Section II.L) but are not required to do so.

Geographic Area: (see Section II.J - Geographic Scope) In addition, the geographic area for this topic includes the entire Bay-Delta watershed and its tributaries, including the upper and lower watersheds.

Available Funding: It is expected that up to \$2,300,000 in federal funding will be available for this topic, however, it is possible that not all of this funding will be obligated this funding cycle.

Coordination: Proposals should be coordinated with related resource protection efforts.

2. Criteria for Formal Proposal Evaluation

Formal proposals which meet the minimum requirements shall be evaluated using the following criteria.

- a. Community-based (20 points)
- b. Significant environmental results (10 points)
- c. Consistent with CALFED and related efforts(15 points)
- d. Multiple ecosystem issues (5 points)



- e. Provide for ongoing implementation (5 points)
- f. Monitoring (5 points)
- g. Applicant's ability (10 points)

For each of the aforementioned criteria, the considerations are as follows:

a. Community-based (20 Points)

• Is the proposal it community-based and formed and does it include local leadership, participation of diverse interests, and foster collaboration among multiple interests?

b. Significant environmental results (10 Points)

 Does the proposal contribute to ongoing local watershed stewardship that can achieve significant environmental results?

c. Consistent with CALFED and related efforts (15 Points)

• Is the proposal consistent with CALFED principles and goals and related resource protection activities, and does it foster community involvement in CALFED planning and implementation?

d. Multiple Ecosystem Issues (5 Points)

- Does the proposal address multiple ecosystem issues, such as habitat enhancement, rangeland management agricultural practices, urban development, and surface and groundwater quality?
- Is the proposal consistent with related resource protection activities?

e. Provide for Ongoing Implementation (5 Points)

• Is there the ability to "leverage" other funding sources, institutional mechanisms, or other mechanisms to provide for ongoing implementation?

f. Monitoring (5 Points)

 Does the proposal measure success and provide for necessary monitoring, including fostering volunteer monitoring?



g. Applicant's Ability (10 Points)

• Does the applicant demonstrate the capability, experience and qualifications to successfully complete the proposed project?

3. Formal Proposal Format and Content

Local watershed stewardship proposals should follow the proposal format described in this PSP (See Section II.H). However, applicants are encouraged to provide the information, in the described format, that is most responsive to the criteria identified for this topic. In addition, the level of detail should be consistent with the proposed watershed stewardship activities and with the level of funding being requested. As noted elsewhere in this PSP, brief, concise yet thorough proposals are encouraged

4. Contract Requirements

Contract administration may be performed by U.S. EPA, the National Fish and Wildlife Foundation (NFWF), or another entity, depending on the type of project, the type of applicant and the total number of watershed stewardship projects selected for funding. If an applicant is interested in reviewing the appropriate federal forms, including terms and conditions, that apply to selected proposals for this topic, they can be obtained by contacting EPA at (415) 744-1990.



H. Environmental Education

1. Description

Background: The goal of this program is to develop a citizenry that has been lead from awareness of environmental issues toward informed action at the individual and community level concerning natural resource conservation. This program is designed to include all age groups in rural and urban populations.

Eligible Proposals: Proposals will be solicited to fund environmental education programs that:

- increase public awareness, knowledge, and appreciation of natural resources and ecosystem restoration activities, foster active participation in conservation programs, or
- encourage individuals to wisely use natural resources.

Geographic Scope: (see Section II.J - Geographic Scope)

Recommended Funding: It is expected that up to \$300,000 in federal funding will be available for this topic, however, it is possible that not all of this funding will be obligated this funding cycle.

Coordination: This funding is not intended to duplicate existing programs. Proposals should clearly indicate how they supplement or complement existing programs.

2. Criteria for Formal Proposal Evaluation

Environmental Education Proposals should be consistent with the mission of the CALFED program by showing linkages to the education of the public concerning restoration of the ecological health and improvement in water management for beneficial uses. Formal proposals which meet minimum requirements shall be evaluated using the following criteria:

- a. Existing Programs (10 points)
- b. Participation (10 points)
- c. Project Contribution (10 points)
- d. Ecological and Biological Benefits (10 points)
- e. Awareness and Understanding (10 points)
- f. Provide for On-going Implementation (10 points)
- g. Monitoring (10 points)



For each of the aforementioned criteria, the considerations are as follows:

g. Existing Programs (10 Points)

 How does the program complement and enhance existing environmental education efforts? Is the project consistent with and/or does it assist with the implementation of existing programs and/or curricula?

b. Participation (10 Points)

• Does the project include the participation of a variety of partnerships? Is it community based and does it foster collaborative efforts among multiple entities? How does the project address the local needs and concerns of the people served by the project?

c. Project Contribution (10 Points)

• How does the project contribute to on-going local watershed management, resource stewardship or restoration programs? Does it encourage volunteer participation?

d. Ecological and Biological Benefits (10 Points)

Does the project stress an ecosystem approach and address multiple ecosystem issues?

e. Awareness and Understanding (10 Points)

• Does the project create an awareness and understanding of natural resource issues that will lead to informed decisions and responsible actions? Does the project promote critical thinking skills that enable people to recognize the complexity of resource issues and to make choices within social, political, scientific, and economic realities?

f. Provide for Ongoing Implementation (10 Points)

• What is the ability of the project to leverage other funding sources and institutional mechanisms to ensure on going implementation?

g. Monitoring (10 Points)

• Does the project have established mechanisms for measuring results? Describe the mechanisms used to measure success (photos, number of people served, etc).

3. Formal Proposal Format and Content: (See Section II.H)



4. Contract Requirements

The appropriate federal forms, including terms and conditions, that apply to successful proposals are provided in Attachment E. All proposals must include FORM DI-2010 when submitted.



I. Small Screen Evaluations and Alternatives

1. Description

Background: There are a large number of relatively small diversions diverting water from the Sacramento and San Joaquin rivers and their tributaries. These smaller diversions have the potential to entrain juvenile fish but there is relatively little data that can be used to identify where the biological benefits would be the greatest in a program to screen smaller diversions.

The most effective means of preventing entrainment is to screen these diversions with a modern fish screen. Evaluations of alternative methods of preventing entrainment at larger diversions have not identified any effective solutions other than positive fish screens. However, when evaluating screening at smaller diversions under 25 cfs, there may be other techniques for preventing entrainment that could be cost effective in some situations.

Eligible Proposals: Proposals are being solicited that focus on development of information that can be used to prioritize efforts to screen small diversions. This can include determination of the biological benefits of screening small diversions through an evaluation of entrainment potential at several locations by field sampling. There are also locations where it is possible to evaluate a screened and an unscreened diversion. The proposals should document how locations are to be compared, number of locations to be evaluated, and methods and techniques to be used to evaluate results. The proposal should also document how the results could be used to develop a method to assign priority to small unscreened diversions.

Proposals are also being solicited to determine if there are other techniques, other than positive fish screens which can significantly reduce entrainment and to evaluate these techniques in an appropriate setting to.

The applicant should have written permission from the owner of any diversion where they propose to sample.

Geographic Area: (see Section II.J - Geographic Scope)

Available Funding: It is expected that up to \$200,000 in state funding will be available for this topic, however, it is possible that not all of this funding will be obligated this funding cycle.

Coordination: Actions need to be coordinated with BOR, NMFS, FWS, DWR, DFG, and with local organizations, watershed conservancies, landowners and water districts.



Input should be sought from groups involved in fish screening issues such as the Fish Facilities Team, the CVPIA's Anadromous Fish Screen Program, the Interagency Ecological Program's Agricultural Diversion Project Work Team, local Resource Conservation Districts, and local watershed groups.

2. Criteria for Formal Proposal Evaluation

To be eligible for funding all proposals should benefit one or more of the priority species or habitats listed in Section II-L. Formal proposals which meet the minimum requirements shall be evaluated using the following criteria:

- a. Ecological and biological benefits (25 points)
- b. Applicant's ability (5 points)
- c. Technical feasibility and timing (15 points)
- d. Compatibility and benefits to non-ecosystem CALFED objectives (5 points)
- e. Cost (10 points)
- f. Cost sharing and local involvement (5 points)
- g. Monitoring, assessment, and reporting (5 points)

note: Cost sharing and local involvement are not mandatory requirements, but are encouraged.

For each of the specified criteria, the considerations are as follows:

a. Ecological/Biological Benefits (25 Points)

- What is the ecological and biological effectiveness of the proposal in addressing a stressor and benefiting priority species or habitats?
- How does the project meet ERPP objectives and list the specific target(s) met by the
 proposal note: applicants should identify the specific ERPP objectives addressed
 in their proposal and include the ERPP section, objective, and page number.
 How does the project address the objectives of the Anadromous Fish Restoration
 Program (AFRP) or other sections of the CVPIA.
- Are there multiple benefits to species, habitats or natural processes? Are multiple stressors addressed?
- To what extent does the proposal use natural processes and functions as a means of restoration?
- Is the proposal expected to provide long-term ecological/biological benefits?



- b. Applicant's Ability: applicant's capabilities, experience, and record of past performance as well as experience and qualifications of key personnel (5 Points)
- Does the applicant's experience, education, or background indicate that he/she is capable of implementing the proposal?
- If the applicant has received grants or contracts previously, what is the applicant's past record of performance in meeting the objectives and conditions of those grants and contracts?
- c. Technical Feasibility and Timing (15 Points)
- Is the proposal sound in its technical approach, including but not limited to hydrological modeling where appropriate?
- Have all reasonable options been evaluated?
- Does the proposal demonstrate an understanding of the problems?
- Is the proposal ready to be funded or are there actions that the applicant is planning to complete prior funding?
- d. Compatibility and benefits to non-ecosystem CALFED objectives: water quality, water supply reliability, and system integrity (5 Points)
- Does the proposal have multiple benefits related to the other CALFED objectives?
- Are there conflicts with other CALFED objectives?
- Does the project have the potential for significant adverse or beneficial impacts to third parties? Examples include economic impacts to a community from land use changes, or reduced hydroelectric generation revenues due to changes in water release patterns in a river.
- e. Cost (10 Points)
- How does the cost of the proposal (including direct and indirect costs) compare to other similar proposals?



- Is the level of funding requested for the proposed activity reasonable? How does the applicant plan to use its resources to maximize cost effectiveness, such as labor, equipment, class of staff used for different items, supplies?
- Does the proposal include indirect overhead costs? If so are they reasonable? note: The proposal should indicate the level of indirect overhead costs for each task of the proposed project. Indirect overhead labor costs should include general, administrative, and/or fee costs, if any.

f. Cost Sharing and Local Involvement (5 Points)

- Is the applicant sharing in the cost of the project?
- Are other entities sharing in the cost of the project?
- Does the proposal "leverage" other funding sources to support this or other restoration actions?
- When in-kind services are proposed for cost sharing, does the proposal include a method of documenting in-kind services?
- Is the proposal coordinated with other restoration programs and projects in the area?
- Is there local support or involvement for the proposal? note: The proposal should either state the level and nature of local support, if known, or indicate how the applicant intends to seek and obtain local support.
- Is the proposal supported by a local watershed management plan?
- Does the project have potential for significant local benefits or impacts including activities related to flood control, water diversions, local economy, and/or local landowners?

g. Monitoring, Assessment and Reporting (5 Points)

- Does the proposal provide adequate details and resources for both biological and financial monitoring and reporting?
- Is the biological/ecological monitoring component of the proposal coordinated with existing and/or anticipated monitoring programs?



- Does the proposal have performance measures and indicators to determine biological/ecological success?
- Does the proposal include a discussion to compare the proposed methodology with alternatives to support its approach?
- 3. Formal Proposal Format and Content: (See Section II.H)

4. Contract Requirements

The terms and conditions which will apply to successful proposals are provided in Attachment D. Note that terms and conditions may vary depending on the type of applicant and the type of project. Also, contract administration may be performed by CALFED or the National Fish and Wildlife Foundation (NFWF), depending on the type of applicant and type of project.

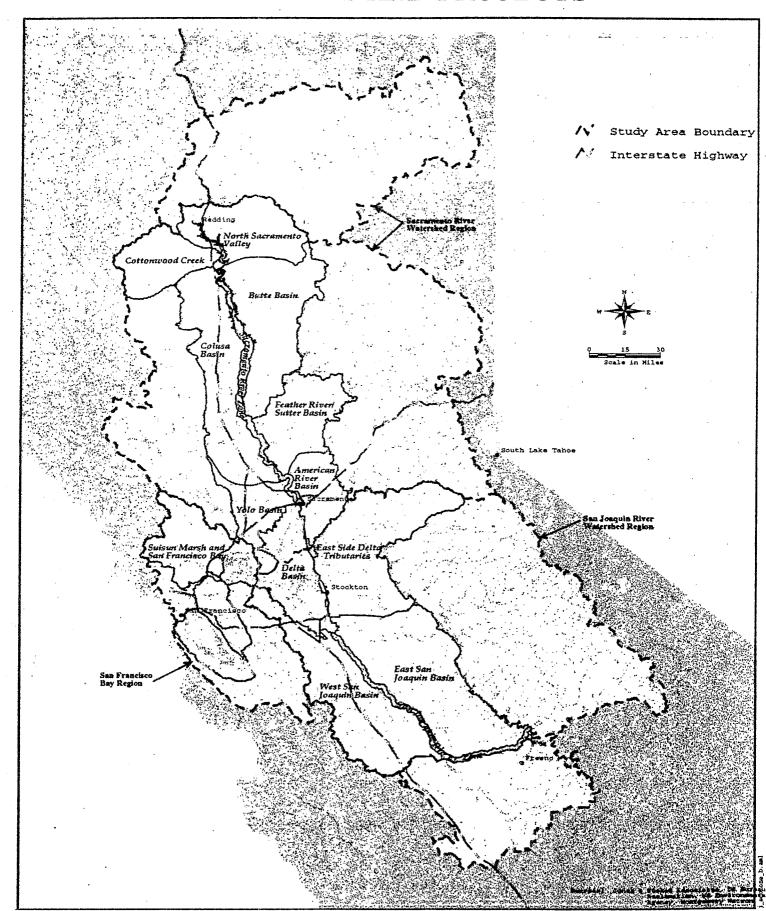
Note also that specific documents should be submitted with the proposal and are identified in Attachment D, Table D-1.



Attachment A Geographic Scope of PSP Projects and Programs



GEOGRAPHIC SCOPE OF RFP PROGRAMS AND PROJECTS



Attachment B Implementation Strategy Excerpts

Habitats

Habitat types that have experienced the greatest declines and which provide the broadest ecosystem benefits and/or benefits to the priority species include the following:

1. Tidal perennial aquatic habitat (freshwater).

<u>Description</u>. Includes shallow aquatic habitats, particularly less than 9 feet deep from mean high tide.

<u>Priority rationale</u>: This habitat type has declined dramatically in the Delta. It provides habitat for many fish and wildlife species, and contributes to the primary and secondary productivity of the food web in the Delta. Implementation of pilot projects would allow restoration techniques to be refined. Experience restoring this type of habitat has been limited and there are questions related to benefits that can be provided for salmon rearing in the Delta that need to be answered as part of the larger ERPP.

<u>Examples</u>: A project that is already underway is the Prospect Island Project. <u>Key species</u>: Species potentially benefitted by this habitat type include Delta smelt, salmon, wildlife and plant species in the following guilds: shorebird and wading-bird guild, waterfowl guild, freshwater emergent wetlands plant association.

2. Seasonal wetland and aquatic

<u>Description</u>: Includes seasonal wetland habitats within the floodplain which are inundated seasonally by high water or seasonal wetland habitats which can be managed to recreate these natural processes.

Priority rationale: Seasonal wetlands within the floodplain can provide habitat for aquatic species such as Splittail spawning and salmon rearing and for wildlife species such as waterfowl and shorebirds. They also provide functions such as nutrient cycling and foodweb support. Seasonal wetlands provide foraging and adjacent uplands provide nesting habitat for waterfowl and other water-dependant wildlife species, some of which are listed such as the greater sandhill crane, giant garter snake, California clapper rail, and Aleutian Canada goose. Historically, the Central Valley provided over four million acres of natural wetland habitat but this has been reduced by over 90%. Natural seasonal wetlands have been greatly reduced by levee construction for agricultural conversion and urbanization, significant changes in hydrology and water quality, and construction of flood control and navigation projects. In some areas, these changes have precluded the ability to restore seasonal wetlands through natural processes so they should now be recreated through intentional irrigation and management to provide the same wetland



functions. In other areas, the natural processes are still capable of restoring seasonal wetlands with less management. Where possible, seasonal wetlands will be restored through natural processes and where necessary, they will be recreated through more intensive management. Restoration of seasonal wetlands can also provide opportunities for riparian forest restoration using natural processes if there is not a conflict with flood control operations.

<u>Examples</u>: The Yolo Bypass, the Cosumnes River Preserve/Watershed, and Stone Lakes Wildlife Refuge.

<u>Key species</u>: salmon, splittail, waterfowl and wading birds such as northern pintails and mallards, giant garter snakes, sandhill crane, Aleutian Canada goose, tricolored blackbird, and for the areas where appropriate riparian upland restoration can accompany seasonal floodplain wetlands, grassland species such as western yellow-billed cuckoo, Swainson's hawk, riparian wildlife guild, and neotropical migratory bird guild.

3. Instream aquatic habitat

<u>Description:</u> Includes aquatic habitat in the creeks, streams, and rivers of the Central Valley. Components of this aquatic habitat includes the water flows, sediment supply, water quality, water temperature, and other parameters that interact to provide healthy aquatic habitat.

<u>Priority rationale:</u> This habitat type provides spawning and rearing habitat for most of the anadromous species in the Bay-Delta ecosystem. Native resident species also rely on this habitat type. It plays an important role in the health of estuarine habitat downstream. This habitat type has been impacted by changes in water and sediment supply, losses in riparian habitat discussed under shaded riverine aquatic habitat, changes in water quality and water temperature, and many other landscape level changes in the ecosystem. Examples: Restoration efforts on the Sacramento River.

Key species: Salmonids, splittail, and striped bass.

4. Shaded riverine aquatic habitat

<u>Priority rationale</u>: This habitat type provides food and escape cover for outmigrating salmonid juveniles and is an important source of nutrients in the streams and Delta sloughs. Much of this habitat type along the major rivers and in the Delta has been lost due to river channelization, levee construction and maintenance, and the invasion of exotic flora. Shaded riverine aquatic habitat can been restored in two ways, through restoration on existing levee berms and through restoration of natural processes by modifying flood control facilities such as with levee setbacks. In giving this habitat type priority, the focus should be on restoration using natural river processes with habitat restoration on existing levee berms occurring only where natural process restoration is precluded.

Examples: Sacramento River Refuge/SB 1086, Cosumnes River Preserve



Key species: Salmonids, other riparian dependent species.

5. Saline emergent wetlands habitat (tidal)

<u>Description</u>: Includes tidal brackish and saltwater wetlands.

<u>Priority rationale</u>: This habitat type supports several listed plant and animal species and is important for nutrient cycling and food web support functions. It has also declined due to diking and reclamation of bay lands.

<u>Examples</u>: There are several restoration projects in the North Bay and Suisun Bay. <u>Key species</u>: Salt marsh harvest mouse, Suisun song sparrow, and for some of the restoration projects in the North Bay which restore natural salinity gradients at creek mouths, this type of restoration can be important for aquatic species such splittail and striped bass.

6. Midchannel islands and shoals habitat

Description: Includes the channel islands in the Delta.

<u>Priority rationale</u>: These midchannel islands represent diverse habitat types including shoals, tidal mudflats, tule marshes, shaded riverine aquatic, and riparian scrub habitat. These habitat remnants are a high priority for protection and restoration because collectively they comprise a significant fraction of the remaining natural habitat in the Delta, they continue to be threatened, and they are one of the few habitat areas in many areas of the delta where habitat restoration opportunities have not been complicated by subsidence.

Examples: Staten Island midchannel island project

<u>Key species</u>: Delta smelt, salmon, shore bird and wading-bird guilds, and waterfowl guild.

7. North Delta agricultural wetlands and perennial grasslands

<u>Description</u>: Includes agricultural lands seasonally flooded and perennial grassland habitat.

<u>Priority Rationale</u>: Agricultural wetlands and perennial grasslands in the north Delta, may also need to be included because they provide opportunities for restoration of seasonal floodplains and tidal perennial aquatic habitat due to the limited amount of subsidence that has occurred. These habitat types in the north Delta are rapidly being converted to vineyards which could preclude opportunities for restoration in the future. Other agricultural wetlands will be considered in determining the actions needed to address priority species.

Examples: Stone Lakes Wildlife Refuge, Jepson Prairie Preserve

<u>Key Species</u>: These habitat types in this area currently provide foraging habitat for shorebirds, waterfowl, Swainson's hawks, and sandhill cranes. Any future restoration of these lands would incorporate the existing terrestrial and avian wildlife benefits as well as provide benefits to aquatic species such as Delta smelt, and salmon.



Priority Species or Populations

Species or populations that are at the greatest risk of decline and whose recovery contributes the greatest to the CALFED mission include the following aquatic species that are listed, are being considered or are likely to be considered for listing, or aquatic species with high recreational value and in serious decline. Using these species, the stressors or factors affecting them and the actions needed to address the stressors will be identified by technical experts. These actions will then be evaluated to ensure that they are consistent with the criteria included at the end of the Implementation Strategy.

Primary

1st Tier: Winter-run chinook salmon, spring-run chinook salmon, San Joaquin and eastside Delta tributary fall-run chinook salmon, steelhead trout, delta smelt, green sturgeon, and Sacramento late fall-run chinook salmon.

2nd Tier: Longfin smelt, splittail, and white sturgeon

Secondary

Striped bass, migratory birds, Sacramento fall-run chinook salmon, and American shad.

- 1. <u>San Joaquin River and east-side tributary fall-run chinook salmon:</u> The chinook salmon is an important native anadromous sport and commercial fish with important ecological value. The fall-run race on the San Joaquin River is designated as a species of concern by USFWS.
- 2. <u>Winter-run chinook salmon:</u> The chinook salmon is an important native anadromous sport and commercial fish with important ecological value. The winter-run race is listed as endangered under the state and federal Endangered Species Acts.
- 3. **Spring-run chinook salmon:** The chinook salmon is an important native anadromous sport and commercial fish with important ecological value. The spring-run race on the Sacramento River is designated as a closely monitored species by DFG and a species of concern by USFWS.
- 4. <u>Delta smelt:</u> The Delta smelt is a native estuarine resident fish that has been listed as threatened under the state and federal Endangered Species Acts.
- 5. **Splittail:** The Sacramento splittail is a native resident fish that is proposed for listing under the federal Endangered Species Act and a candidate for listing under the State Endangered Species Act. The Sacramento splittail also supports a small winter sport fishery in the lower Sacramento River.



- 6. **Steelhead trout:** The steelhead trout is an important native anadromous sport fish of high recreational and ecological value that is proposed for listing under the federal Endangered Species Act.
- 7. <u>Green sturgeon:</u> The green sturgeon is designated as a species of special concern by DFG and a species of concern by USFWS.
- 8. **Striped bass:** The striped bass is an important non-native anadromous sport fish with high recreational value. It also plays an important role as a top predator in the aquatic system.
- 9. <u>Migratory Birds</u>: Includes both waterfowl guild and neotropical migratory bird guild. Many of these species migrate through, winter, or breed in the Bay-Delta. Waterfowl are a significant component of the ecosystem, are of high interest to recreational hunters and bird watchers, and contribute to California's economy. Representative species include canvasback, mallard, pintail, and snow geese. The neotropical migratory bird guild are of high interest to recreational bird watchers and there have been substantial losses of habitat used by these species.



Attachment C Information on Stressors Affecting Priority Species and Habitats

Included in this section are descriptions of the stressors affecting the priority species. Also included are tables identifying the relative importance of each stressor for each priority species. The information on the stressors and the relative importance of each stressor for each priority species was developed by the geographic technical teams and the 1997 Integration Panel.

1. Alteration of Flows and Other Effects of Water Management

<u>Hydrograph Alterations</u>. Alteration of the hydrograph can have wide ranging effects on biological resources due to direct and indirect effects on habitat quantity and quality caused by changes in flow. Flows may affect aquatic habitat through changes in depth, velocity, wetted area, water quality, sediment transport, and other factors. Flow related stressors on fish, wildlife, and riparian resources include inadequate flow, flow variability, seasonal flow changes or flow timing, stranding due to flow fluctuation, lack of flushing flows, lack of attraction flows, lack of channel forming flows, saltwater intrusion, and other factors.

Changes in the hydrograph are linked to a number of other stressors and processes in the ecosystem, and actions to address these changes may have benefits for related stressors such as water temperature, hydrological isolation of floodplains, migration barriers, geomorphic process constraints, or lack of riparian regeneration potential.

Restoration actions targeted at hydrograph alterations could include evaluation of water needs for fish or wildlife, or assessment/revision of water management operations. Category III funds cannot be used for direct acquisition of water.

<u>Entrainment</u> Direct mortality to fisheries resources occurs as a result of unscreened diversions, diversions not screened to current standards, inoperable screens, and impingement. The significance of this stressor on a fish population varies depending on the size, location, type, duration and timing of the diversion. Due to the influence of river flows and timing of water diversion on entrainment risk, there is some linkage between entrainment and other water management related stressors.

Restoration actions targeted at reducing entrainment may include new fish screens, screen rehabilitation, screen improvements, or alternatives to screening such as consolidation or relocation of diversions. Alternative diversion methods such as in-gravel wells may also serve to reduce entrainment.



Migration Barriers and Straying. Migration barriers or delays may be caused by physical structures, insufficient flow over shallow areas, inadequate attraction flows, adverse water quality conditions, delayed flooding of marshlands, or other factors. Barriers to movement of migrating fish species are a stressor because they may affect the physical condition (e.g., mechanical injury due to diversions, screens, dams, etc.), physiological condition (e.g., spawning readiness, smolting, etc.), and/or ecological status (e.g., predation risk, run timing, outmigrant survival, etc.) of anadromous fish. Barriers to upstream movement may prevent access to upstream spawning habitat, and delays in upstream migration can increase predation risks and decrease spawning success. In addition, straying related to barriers can result in loss of adults to the spawning population if they are unable to locate suitable spawning habitat.

Barriers are often associated with other stressors in the system, including water management activities and the associated structures and flow changes, and water quality degradation related to changes in land use.

Restoration actions to address barriers caused by physical structures, water quality constraints, or hydrological conditions could include bypass arrangements such as fish ladders, physical barrier removal, improvements in water quality, or flow changes or augmentation that prevent straying and allow passage.

2. Floodplain and Marshplain Changes

Hydrological Isolation of Floodplain or Marshplain. Hydrological isolation of the floodplain or marshplain occurs when there is a lack of flow over these areas and/or a lack of return flow to the main channel. The lack of flow functionally isolates the floodplain from the main channel, and prevents ecologically beneficial floodplain and river interactions such as gravel recruitment, fine sediment deposition on the floodplain, nutrient input to the river, riparian zone regeneration, woody debris recruitment input, creation of spawning habitat, and other important processes.

Reconnection of the hydrological link between the river and floodplain can be addressed through a variety of physical or hydrological changes, including improved drainage connections between floodplains and rivers, alteration of the hydrograph to facilitate floodplain inundation, or restoration of hydrological links to historic floodplain areas.

<u>Physical Isolation of Floodplain or Marshplain</u>. Physical isolation of the floodplain or marshplain includes habitat fragmentation, loss of seasonal and tidal wetlands due to levee construction, or other land use changes that physically separate the floodplain or marshplain from the main water channels. Physical isolation of these areas results in habitat discontinuities which decrease their suitability for aquatic and terrestrial species. Physical isolation of the floodplain or marshplain is closely linked with hydrological isolation, and related land use stressors on the ecosystem.



Restoration actions associated with floodplain or marshplain habitat could include reconnection of the floodplain or marshplain to the water channel to allow a more natural inundation cycle, using setback levees, flood bypass areas, floodplain easements, or other methods. Other actions could include managed flooding of historic floodplain areas or suitable agricultural lands.

Elimination of Fine Sediment Replenishment. Fine sediment replenishment of floodplain and marshplain areas occurs when these areas are inundated by high flows or tidal action. This process is interrupted by isolation of the floodplain or marshplain, and can result in decreased food production and diminished nutrient cycling due to a lack of fine sediment deposition in vegetated areas. Restoration actions that address hydrologic or physical isolation of the floodplain or marshplain can also address this stressor.

3. Channel Form Changes

Alteration of Channel Form. Alteration of channel form includes loss of shallow water habitat due to channel reconfiguration, channel deepening, lack of floodplain, degradation of instream habitat conditions, and loss of lotic conditions (free flowing stream conditions). These changes result in reduced suitability of in-channel or stream corridor habitat for fish and wildlife species due to changes in hydraulic conditions, cover, predation risk, and other factors.

Channel form alterations are generally aimed at restoring natural physical processes within the constraints of a managed system. Projects may include streambed alterations to increase channel complexity, substrate changes, restoration of slough or mid-channel island complexes, or other floodplain manipulations.

<u>Prevention of Channel Meander.</u> Channel meander is a natural process that contributes to creation and maintenance of important aquatic and terrestrial habitat features. Preventing channel meander can result in associated stressors such as channel deepening, loss of shallow water habitat and channel complexity, reduced gravel recruitment, riparian encroachment, and bank armoring. Prevention of channel meander is linked to other floodplain stressors, such as isolation of the floodplain, water management activities, changes in the hydrograph, and lack of riparian vegetation.

Actions which restore channel meander and/or associated natural processes may include protection of existing riparian belts or creation of new riparian areas, increasing channel complexity through structural modification, and construction of setback levees.

<u>Isolation or Elimination of Sidechannels and Tributaries.</u> Isolation of sidechannels or tributaries due to structural changes or water management actions can lead to a loss of woody debris recruitment, loss of rearing and spawning habitat, loss of refuge habitat, and decreased



food production for fish and wildlife species. This stressor is linked to other floodplain related stressors such as floodplain isolation, prevention of channel meander, land use changes, and alteration of the hydrograph.

Actions which restore processes associated with tributaries and sidechannels could include main channel changes, structural modifications to habitat in existing channels, or reconnection of isolated channels or tributaries.

<u>Reduction of Gravel Recruitment</u>. Reduction of gravel recruitment results in a direct loss of spawning habitat, and the potential for increased gravel armoring that makes gravel beds less suitable for spawning. This stressor is related to other floodplain processes such as channel meander, and water management actions that affect flood flows and floodplain inundation.

Gravel recruitment actions may include gravel source identification, spawning gravel acquisition, gravel introduction, spawning gravel improvement projects, or measures to increase natural gravel recruitment.

<u>Channel Aggradation Due to Fine Sediments</u>. Accelerated erosion or decreased sediment transport capacity can result in changes in channel form by increasing the deposition of fine sediments in the stream channel. Increased fine sediment loads are often detrimental to salmonid species because they decrease the suitability of spawning gravels, and they are a less productive substrate for growth of aquatic invertebrates and other food organisms.

Fine sediment loads are closely linked to land use practices that influence erosion, watershed management in upstream areas, gravel recruitment, and channel form changes that influence sediment transport capacity. Restoration actions related to fine sediment management could include site-specific or watershed-wide efforts to decrease sediment input, mechanical removal of existing sediment, or increases in sediment transport capacity due to water management changes.

Loss of Existing Riparian Zone or Lack of Regeneration Potential. Loss of the riparian zone can be a stressor on the ecosystem by reducing food supplies for fish and wildlife, eliminating Shaded Riverine Aquatic (SRA) habitat, reducing channel complexity, and eliminating cover and nesting habitat. Since the riparian zones are typically associated with floodplains and river banks, they are linked to other stressors such as floodplain isolation, prevention of channel meander, and water management activities. The restriction of many riparian areas to sections of levee creates a close association between riparian habitat and levee maintenance practices such as riprapping or burning.

Riparian restoration projects could include riparian corridor easements, rehabilitation of riparian areas, riparian protection plans, land use changes, restoration of adjacent land for buffer zones, and foraging and nesting habitat.



4. Water Quality

<u>Increased Contaminants</u>. Increased contaminant loads can be caused by urban runoff, agricultural runoff, mine drainage, refineries, wastewater treatment plants, and other point or non-point pollution sources. They can be a stressor on the ecosystem due to acute or chronic toxicity on aquatic organisms, including fish, and may be particularly deleterious for younger life stages of fish that may have longer exposure and higher sensitivity to toxic compounds.

Increased contaminant loads are related to other stressors in the system, including land use practices and hydrograph alterations.

Contaminant control actions may include identification of pollutant sources, evaluation of effects, remediation, monitoring, or education in order to identify and reduce impacts on salmonids and other aquatic resources.

<u>Increased Salinity</u>. Increases in salinity are a specific type of water quality stressor on freshwater or estuarine species associated with the North Bay and portions of Suisun Marsh and the Delta. Increased salinity may be due to water management, operation of diversions or structures, runoff, etc. Salinity increases are linked to water management and land use stressors. In the North Bay, salinity is linked to historical land uses.

Actions to decrease salinity in freshwater areas could include revised land use practices, flow alterations, runoff control, or other measures.

<u>Increased Nutrient or Carbon Input</u>. Increased input of nutrients from agricultural runoff, wastewater treatment, and other sources can be an ecosystem stressor, and may be associated with low dissolved oxygen or other water quality stressors. In particular, low dissolved oxygen levels can link this stressor to related migration barriers. Restoration actions which limit the deleterious input of large quantities of nutrients may include agricultural runoff control, wastewater treatment, flow management in critical areas, or other measures.

<u>Increased Mobilization of Contaminants Due to Dredging</u>. Dredging can be a stressor on the ecosystem due to increased turbidity, contaminant mobilization, or associated dredge spoil disposal issues. In some cases, turbidity and contaminant mobilization can result in acute or chronic toxicity problems for aquatic species. Land based dredge spoil disposal may have associated terrestrial habitat impacts on plant and wildlife species.

Dredging related restoration actions may address methods for controlling turbidity effects, Preventing mobilization of toxic compounds, facilitating safe dredge spoil disposal, or developing beneficial uses for dredge spoil.

5. Water Temperature



High water temperatures are a stressor on many cold water aquatic species, and may be caused by lack of riparian shade, lower flows, increased water surface area, warm water inflow, or other factors. Warm water temperatures can adversely affect spawning or rearing habitat, especially for salmonids. Since high water temperature can affect multiple life stages of a species, its impact on the egg, fry, and smolt lifestages of salmonids can result in a substantial cumulative mortality effect.

Water temperature is closely correlated to air temperature in many cases, but may be heavily influenced by the related stressors of hydrograph alteration (particularly below large reservoirs) or lack of riparian shade.

Water temperature related actions not included as part of hydrograph alterations or riparian revegetation may include increased modeling or monitoring work, and evaluation of additional temperature management options.

6. Undesirable Species Interactions

Introduction of New Exotic Species. Introduction of new exotic species can occur from ballast water discharge, inadvertent release of exotic species, or intentional introduction of exotic species for other reasons. Exotic species represent a predatory and competitive threat to native species, and can compromise beneficial uses of native fish, wildlife, and plants. Control of exotic species introductions is closely linked to educational efforts associated with human disturbance of the ecosystem. In addition, an overall improvement in ecosystem health can decrease the system's vulnerability to colonization by exotic species.

Actions which address introduction of exotic species may be regulatory or educational in nature, and may include specific actions aimed at preventing new exotic species introductions.

Elevated Predation and Competition Losses. Predation and competition are natural mortality factors that may have an unnaturally significant effect on native fish populations when they are intensified by introduced species, habitat changes that favor predators or introduced species, or other changes that increase the vulnerability of the prey. Elevated losses of native species may occur due to striped bass predation, other introduced predatory species, competition for nest sites by introduced bird species, competition for food resources by introduced fish or mollusk species, and other factors. This stressor is directly related to introduction of exotic species, and to water management activities or land use actions that may alter habitat conditions in favor of predators or introduced competitors.



Predator or competitor control actions may include control or eradication programs, habitat modifications to decrease unnaturally high predation, or research projects related to exotic species control.

<u>Competition from Introduced Plants</u>. Competition from introduced plant species may include invasive aquatic plants such as Hydrilla, invasive riparian zone plants such as Arundo, or invasive salt marsh plants. These species can out compete native species that provide a better food supply for native fish and wildlife species, or they can be so prolific that they create problems for other beneficial land and water uses such as agriculture, water supply, or navigation. This stressor is directly related to introduction of new exotic species.

Minimizing deleterious impacts from exotic plant species may involve control efforts, eradication programs, education programs, or other measures.

7. Adverse Fish and Wildlife Harvest Impacts

Fish and wildlife harvest is a direct mortality factor which can have adverse effects at the population level under certain circumstances. These circumstances may include ocean and freshwater overharvest (particularly in cases of depleted salmon runs), poaching, or inadequate fishing regulations related to size limits or fishing locations. Poaching of migrating adult salmon after they have entered the tributaries can be particularly detrimental, since most of these fish would have successfully spawned and contributed to greater smolt production.

Potential restoration actions may be related to either legal or illegal harvest, and could include research projects, or improved management tools or techniques.

8. Population Management

Population management stressors include migratory pathway changes caused by physical (e.g., water diversion or barriers) or biological (e.g., genetic) factors, and inadequate reproductive capacity due to small or non-existent spawning populations. These stressors can result in reduced production of smolts due to poor spawning success or adverse outmigration conditions. Population management stressors are related to artificial propagation of fish and the associated genetic and management implications, and also to water management activities that may result in migratory pathway changes.

Population management actions could include genetic investigations related to wild stocks; actions to improve monitoring, sampling, or management of stocks; and establishing or supplementing salmon populations.

9. Land Use



<u>Grazing</u>. Grazing is a land use stressor that may be manifested as a loss of riparian habitat, increased erosion, or decreased water quality that can adversely affect beneficial uses of the ecosystem, and impair the suitability of fish and wildlife habitat. Grazing is related to other stressors in the ecosystem, including other land uses and water quality.

Actions addressing problems related to grazing may include land use changes, fencing, erosion control projects, development of easements, water quality control actions, watershed planning and management, or other measures.

Gravel Mining. Gravel mining is a land use stressor that can result in decreased gravel recruitment, increased fine sediment input, decreased quality of spawning and rearing habitat, increased predation due to gravel pits, warmer water temperatures, stream channel instability, and deleterious changes in channel form. These changes can reduce the suitability of instream physical habitat for many species, and may cause associated water quality problems. Gravel mining is linked to other land use actions, as well as floodplain isolation stressors.

Actions addressing impacts associated with gravel mining could include channel stabilization measures, spawning gravel augmentation, erosion control measures, land use changes, alteration of mining practices, prevention of gravel pit capture by the stream, or other measures.

<u>Urbanization</u>. Urbanization of the watershed may lead to loss of riparian habitat, habitat fragmentation, drainage of wetlands, encroachment into the floodplain, pollutant runoff, and other impacts on the ecosystem. These stressors result in decreased habitat suitability, and can impair other beneficial uses of the system due to changes in water quality or needs for more intensive water management (such as flood control actions). Urbanization is related to other land use stressors, as well as water quality issues and floodplain isolation.

Restoration measures aimed at urbanization impacts may be regulatory, educational, planning oriented, or related to land acquisition.

<u>Forestry and Agricultural Practices</u>. Forestry and agricultural practices in the watershed can be stressors due to conversion of floodplain to agricultural use, land subsidence, increased erosion, loss of habitat complexity, and water quality degradation. This can result in decreased suitability of an area for fish and wildlife habitat, water supply, agriculture, or other beneficial uses. Forestry and agricultural practices are related to other land use stressors, as well as water quality concerns and floodplain isolation.

Restoration actions related to these practices may be site-specific or watershed-wide, and may include planning efforts, educational programs, acquiring easements or buffer zones, or developing technical management practices.



10. Artificial Propagation of Fish

Artificial propagation of fish can be a stressor on the wild population due to genetic changes and related fitness concerns associated with hatchery management, run or stock hybridization, altered timing of runs, effects of smolt releases on wild populations, introduction of pathogens, incidental spring run mortality, increased striped bass populations, and other factors. Artificial propagation activities are related to overall population management stressors.

Restoration actions related to artificial propagation could include evaluation of existing hatchery operations, assessment of new hatchery needs, or studies of hatchery impacts and benefits. Hatchery expansion planning is not included in the 1998 Category III funding cycle.

11. Human Disturbance

Human disturbance of fish and wildlife populations or habitat by anglers, boaters, and other recreational users could include disturbance of nest sites, trampling of salmon redds, and boat wake damage to SRA habitat. The disturbance can lead to habitat degradation and adverse effects on fish or wildlife populations.

Restoration actions addressing other stressors can be made more effective by implementing associated education or other actions to limit human disturbance. The education actions could serve to increase overall public awareness, or may target particular audiences to modify behavior.

12. Wildfire

Wildfire is a potential stressor on the ecosystem due to the associated loss of habitat, particularly in riparian zones. Ecosystem stress related to fire may be intentional, as in the case using fire for clearing levees, or it can be related to increased frequency of fire in riparian zones near urban areas.

Restoration actions related to fire management may include development of alternatives to use of fire for levee maintenance, and control of fire within riparian corridors (particularly in urban areas).



PRIMARY SPECIES: SPRING RUN (tier one)

STRESSORS RANK COMMENTS

Alteration of Flows	H	Primarily concerned with migration barriers on tribs, including Deer, Clear and Butte creeks. Also stranding a entrainment.	
Floodplain and Marshplain Changes	Н	Benefits most important for fry outmigrants.	
Channel Form Changes	M/H	Lower tributary areas most important for fry and yearlings. If habitat improved rearing in lower tribs may occur. Riparian habitat also provides secondary benefits: shading, food, multi-species & ecosystem benefits	
Water Quality	L	Less concern than winter run since Iron Mountain Mine not an issue for spring run. Tributary water quality better than mainstem. May be concerned with ag runoff & diazinon. Pesticides and unknown toxicity in Delta are a risk to d/s migrants. Pesticides and urban runoff in lower portions of tributaries are a slight risk to rearing.	
Water Temperature	M	Concern for spring run due to timing of migration and spawning, especially in valley segments of the tributaries.	
Undesirable Species Interactions	L	Predation by striped bass, squawfish, and other predators on juveniles is not considered a problem.	
Adverse Fish and Wildlife Harvest Impacts	M	Poaching is a primary concern when adult fish are in summer holding habitat. May be more susceptible to ocean harvest.	
Land use	M	Concerns due to grazing/gravel mining/ forestry practices & urbanization. Concern with forest roads causing sediment, lack of gravel, cattle grazing. Problems vary by streamneed to look at upper watershed practices.	
Artificial Propagation of Fish and Assoc, Pop. Mgmt.	M/H	High production of hatchery fish on Feather River, potential impact on native gene pool.	
Human Disturbance	М	Concern over recreational uses in summer holding habitat	
Wildfire	L	Could be a problem if there are direct impacts on adult holding and spawning areas due to increased fine sediment input.	



PRIMARY SPECIES: S.J. FALL RUN (tier one)

STRESSORS	RANK	COMMENTS
Alteration of Flows	H	Entrainment at diversion sites, barriers to historic habitat. Causes delayed migration, associated high mortality due to predation, decrease in biodiversity of habitat & stranding of fish.
Floodplain and Marshplain Changes	Н	System severely altered. Restoration on mainstem needs to be tied to changes in the hydrograph to avoid stranding due to flow reductions after inundation of floodplain. There is more opportunity for restoration on tributaries. Levees on lower San Joaquin River.
Channel Form Changes	Н	Gravel mining, gold dredging on tributaries, flood control projects on the mainstem San Joaquin River. Degradation of instream habitat, elevated predation in gravel ponds, gravel recruitment limitations.
Water Quality	M/H	Concerns with dissolved oxygen and water temperature during upstream migration and outmigration. Ag runoff creates problems. Need more information due to unknown toxicity risks. Much worse water quality than in Sacramento River system. All tribs receive agricultural runoff.
Water Temperature	Н	Concern for upstream migrants in the fall and outmigrants in the late spring on lower tributaries (Stanislaus, Merced, and Tuolumne) and the mainstem San Joaquin River.
Undesirable Species Interactions	M	Primary concern is fry and juvenile predation by small and largemouth bass in tributaries, and unknown predators in the Delta.
Adverse Fish and Wildlife Harvest Impacts	М	High harvest rates for Central Valley fall run stocks affect escapement into the San Joaquin River.
Land use	M	General agricultural and urban impacts. Run-off of contaminants from irrigation of selenium-rich soils.
Artificial Propagation of Fish and associated population management	Н	Relatively large production of hatchery fish, low population overall, potential genetic effects, straying, release practices cause problems.
Human Disturbance	L	No evidence of problems.
Wildfire	N/A	



PRIMARY SPECIES: SACRAMENTO LATE FALL RUN (tier one)

STRESSORS	RANK	COMMENTS
Alteration of Flows	Н	Causes delayed migration, associated high mortality due to predation, entrainment, decrease in biodiversity of habitat & stranding of fish.
Floodplain and Marshplain Changes	Н	Causes straying & stranding of fish, decrease in habitat changes complexity, lack of large woody debris restoration.
Channel Form Changes	Н	Causes decrease in habitat complexity, stranding and straying of fish.
Water Quality	M	Potential spilling of Spring Creek Debris Dam below Iron Mtn Mine. May be similar to risks for winter run.
Water Temperature	L	Water temperatures are suitable in upper Sac River.
Undesirable Species Interactions	L	Predation by striped bass and squawfish on juveniles not considered a problem.
Adverse Fish and Wildlife Harvest Impacts	M	Ocean harvest fall run impacts on depressed stocks.
Land use	L	Gravel for spawners is annually introduced by CVPIA.
Artificial Propagation of Fish and Assoc Pop Mgmt	М	Large production of hatchery releases overlap with late fall run, unclear what impacts on the few remaining natural spawners. Less a problem than for steelhead.
Human Disturbance	L	Potential jet-boat disturbance of redds.
Wildfire	N/A	



PRIMARY SPECIES: GREEN STURGEON (tier one)

General comments: No ranking by stressor due to the lack of knowledge regarding what stressor is of most concern. Based on current level of knowledge primary areas of concern include flow, barriers, water quality-sediment, harvest, and entrainment. Additional research needed on the life history of the species.

Panel listed following information ("what we know"):

- Large flows seem to attract species to spawn. Spawning areas are further upstream compared to those used by white sturgeon on the Feather River and Sacramento River.
- · Bottom feeders therefore sediment and water quality of concern.
- Population is down-may be due to harvest.
- DFG radio tagged one green sturgeon (all recaptures of green sturgeon that were tagged in the estuary occurred in the ocean, many off the coast of Oregon and Washington). Large catch in Clifton Ct forebay. Also in 50's before forebay constructed, large catch in vicinity of Santa Clara shoals. Also known to pass RBDD and GCID.

STRESSORS	RANK	COMMENTS
Alteration of Flows	*	
Floodplain and Marshplain Changes		
Channel Form Changes		
Water Quality	*	
Water Temperature		
Undesirable Species Interactions		
Adverse Fish and Wildlife Harvest Impacts	*	
Population Management		
Land use		
Artificial Propagation of Fish		
Human Disturbance		
Wildfire		



PRIMARY SPECIES: <u>DELTA SMELT</u> (tier one)

STRESSORS RANK COMMENTS

Alteration of Flows	Н	Relationship of population levels to X-2, and entrainment at export facilities and other in-Delta diversions.
Floodplain and Marshplain Changes	М	Species needs emergent vegetation but not clear if this is limiting factor. Need to protect existing habitat. Need more information on benefits of increased spawning habitat such as marshplain/emergent vegetation.
Channel Form Changes	M	Same as above.
Water Quality	Н	Reason for high is because of concern over salinityX2. Also of concern is contaminant level, due to urban and ag runoff, in Delta and how it may affect delta resident species. Need more information/research on effects on fish. Possible food chain effects.
Water Temperature	L	Not a concern for this species. No evidence of a problem.
Undesirable Species Interactions	M/H	Concern with inland silversides that may prey on larvae and clams which may affect food abundance for delta smelt. All other exotics are lower priority
Adverse Fish and Wildlife Harvest Impacts	N/A	
Land use	L	Linked to water quality problems.
Artificial Propagation of Fish and Assoc. Pop Mgmt	L	Current Biological Opinion and associated action addressing the problem
Human Disturbance	L	No evidence of a problem.
Wildfire	N/A	



PRIMARY SPECIES: STEELHEAD (tier one)

General comments: Research needed on life history and ecology of steelhead with particular interest in outmigration, genetic implications of hatcheries, Coleman impacts, mainstem production, timing of runs. Complex animal. Many of the actions need to be at the research and pilot level of implementation.

STRESSORS	RANK	COMMENTS
Alteration of Flows	Н	Dams blocked access to historic spawning/rearing areas. There are some barriers on remaining stream reaches that are influenced by alteration of flows. Also stranding and entrainment.
Floodplain and Marshplain Changes	Н	Reduction of flood frequency and magnitude, and bank protection projects, alters remaining habitat for rearing and outmigration. Floodplain and marshplain benefits most important for fry outmigrants.
Channel Form Changes	Н	Lower elevation tributaries are important, and many of them are degraded.
Water Quality	L	Iron Mountain Mine (Spring Creek) discharge affects only the upper Sacramento River habitat, and has a low impact at the population level. Pesticides and unknown toxicity in Delta are a risk to d/s migrants. Pesticides and urban runoff in lower portions of tributaries are a slight risk to rearing.
Water Temperature	M	May be able to address with reservoir management to reduce temps for oversummer rearing fish. They are more tolerant of warm water temperatures than salmon.
Undesirable Species Interactions	L	Same predator concerns as salmon, but smolts are typically larger as outmigrants.
Adverse Fish and Wildlife Harvest Impacts	Н	Inland tributary concern with sport harvest. Juvenile steelhead and rainbow trout are indistinguishable
Land use	M	Concern with forest roads causing sediment, lack of gravel cattle grazing. Problems vary by streamneed to look at upper watershed practices
Artificial Propagation of Fish and Assoc. Pop. Mgmt.	M/H	Almost all have now originated from hatcheries, few natural spawners, few wild fish, problems of release practices, hatchery runs compete with natural spawners. Hatchery stocks taken from out of basin.
Human Disturbance	L	Potential jet-boat disturbance of redds.
Wildfire	L	Could be a problem if there are direct impacts due to fine sediment input to tributaries.



PRIMARY SPECIES: WINTER RUN (tier one)

STRESSORS	RANK	COMMENTS
Alteration of Flows	Н	Causes delays in migration and emigration (which can result in higher mortality due to predation), decreases habitat complexity, causes stranding of fish due to flow fluctuations, and leads to entrainment.
Floodplain and Marshplain Changes	Н	Benefits to instream habitat. Increase in large woody debris may increase escapement numbers the following year by providing oversummering habitat.
Channel Form Changes	Н	Decreases habitat complexity and limits gravel for spawning
Water Quality	М	Contaminants focus: consider Iron Mtn Mine possible effects on food web. Metals in upper Sacramento River are a risk to rearing. Pesticides and unknown toxicity in Delta are a risk to rearing and d/s migrants and have a possible food chain effect. Pesticides in the lower portion of the tributaries are a risk to rearing.
Water Temperature	L	Biologically important but currently is only a problem in extremely dry years with drawdown of Lake Shasta.
Undesirable Species Interactions	L	Predation by striped bass and squawfish on juveniles not considered a problem.
Adverse Fish and Wildlife Harvest Impacts	М	Poaching in inland rivers is main concern/ocean harvest has been problem but current regulations and biological opinion address problem.
Land use	L	Gravel for spawners annually introduced (CVPIA).
Artificial Propagation of Fish and Assoc Pop Mgmt	L	Hatchery releases less a problem on WR than on other runs.
Human Disturbance	L	Potential jet-boat disturbance of redds.
Wildfire	L	No evidence of a problem.



PRIMARY SPECIES: SPLITTAIL (2nd tier)

STRESSORS RANK COMMENTS

Alteration of Flows	Н	Shallow areas important for spawning. Regulated flows affect frequency of shallow water availability.
Floodplain and Marshplain Changes	Н	Floodplain/marshplain provides primary spawning habitathabitat may be limiting in Delta. Major spawning areas are presently in the Yolo Bypass and San Joaquin River.
Channel Form Changes	Н	Lack of SRA for rearing area.
Water Quality	М	Delta resident, spends more time in Delta, leading to higher exposure. Severe lack/gap of knowledge.
Water Temperature	L	Not an issue for this species.
Undesirable Species Interactions	L	None known.
Adverse Fish and Wildlife Harvest Impacts	L	Not an issue. Adults harvested in local fishery.
Land use	L	Urban area (Stockton), Delta agriculture leads to water quality and other impacts.
Artificial Propagation of Fish	N/A	
Human Disturbance	N/A	
Wildfire	N/A	



PRIMARY SPECIES: LONGFIN SMELT (2nd tier)

Comments/notes: Downstream of X2, 2-yr. life cycle, older the further downstream. Most years in San Pablo or W. Suisun, spawn in Big Break Delta or Western Delta. Emergent vegetation not limiting there. Larvae move quickly out of emergent veg. Diet--neomysis mainly.

CTDECCODC	DANIEZ	COMMENTED
STRESSORS	RANK	COMMENTS

Alteration of Flows)HI	Reduction in outflows, entrainment issues. Abundance correlates positively with greater flow. Mechanism appe to relate to broader distribution of young in shallow, productive areas and therefore greater survival.	
Floodplain and Marshplain Changes	ML	Habitat it lives in is not greatly altered or limiting. Lives in saline/brackish water, open shallow water habitat and emergent vegetation. Need to ensure existing habitat protected, food supply from marshplain may benefit fish.	
Channel Form Changes	L	Channel form does not affect its habitat, which is open shallow water and emergent vegetation.	
Water Quality	ML	Delta water high toxicity due to contaminants. Impact on fish resident to delta not known but of concern. Possible food chain effects.	
Water Temperature	L	Not an issue.	
Undesirable Species Interactions	МН	X-2 relationship has declined, linked to introduced clam. Clam seen as an indicator of potential impacts from other introduced. species. Possible food web relationship. Zooplankton changed also by clam. Need more info on management techniques.	
Adverse Fish and Wildlife Harvest Impacts	N/A	·	
Land use	L	Linked to water quality.	
Artificial Propagation of Fish and assoc. pop mgmt	N/A		
Human Disturbance	L	No evidence of a problem.	
Wildfire	N/A		



PRIMARY SPECIES: WHITE STURGEON (2nd Tier) (CVPIA)

STRESSORS RANK

COMMENTS

Alteration of Flows	Н	Flow provides spawning cues, low flow can create migrabarriers.	
Floodplain and Marshplain Changes	L	Not a primary habitat, but data gaps on life stages and habitat. Uses main rivers for spawning in mid-channel.	
Channel Form Changes	L	Gravel alteration may affect species due to its use of coarse sand. (1) Uses cobble and coarser substrate for spawning.	
Water Quality	МН	See warning for human consumption. Se, Hg, pesticides, PCBs are a concern in tissues. Problems with ag and urb runoff risk in the Delta and bay. Benthic feeders. Data gap-regarding effects on spawning	
Water Temperature	L	Not an issue for this species.	
Undesirable Species Interactions	L	Linked with water quality and clam abundance. Triggered by water quality issues. New clam concentrate Se. Not as sensitive to introduced species (2).	
Adverse Fish and Wildlife Harvest Impacts	МН	Production information based on old fish which are no longer around, younger fish are more abundant and are not as productive. Poaching in SJ/Sac.	
Land use	L	Linked to water quality issues.	
Artificial Propagation of Fish and Assoc. Pop. Mgmt.	Ļ	Currently the wild and aquaculture populations are separate, and no interactions between these populations are anticipated in the future.	
Human Disturbance	N/A		
Wildfire	N/A		

- (1) Assume this refers to spawning habitat. Do we really think we can justify this statement? Has the amount or location of coarse sand changed to some quantified degree?
- (2) Is the issue here bioaccumulation of toxic elements or an alternative prey source? Are the clams displacing some other prey species. There is a large unknown element here. Do we feel we know enough to rank it as a low?



SECONDARY SPECIES: MIGRATORY BIRDS

STRESSORS

SCORE

COMMENTS

Alteration of Flows	Н	Tied to amount of wetted areas. Have altered natural hydrology which is needed for successful floodplain restoration.
Floodplain and Marshplain Changes	Н	95% loss of wetlands, loss of riparian areas.
Channel Form Changes	Н	Need river meander process, to create riparian habitat and backwaters habitat.
Water Quality	M/H	Se, mercury, pesticides, PCBs a concern in tissue. Problems from ag and urban runoff. Need to look at specific species. Generally a greater problem in S.J. River valley and Bay
Water Temperature	N/A	
Undesirable Species Interactions	L	Nest predation by red fox, cowbird (Nesting), specific to certain species and certain regions.
Adverse Fish and Wildlife Harvest Impacts	L	Migratory bird poaching/illegal hunting (??)
Land use	Н	Riparian cleared for AG, urbanization. Habitat fragmentation. Impacts neotropicals because of ag clearing of riparian areas.
Artificial Propagation of Fish	N/A	
Human Disturbance	L	Recreational activity in delta. Maybe a concern for certain species-Swainson Hawks.
Wildfire	L	Loss of riparian concern in some areas.



SECONDARY SPECIES: STRIPED BASS

STRESSORS	RANK	COMMENTS
Alteration of Flows	H	Needs flow to spawn, entrainment issues, potential larval transport issues. Delta outflow enhances production.
Floodplain and Marshplain Changes	ML	Use wetlands and marshes in estuary as rearing areas.
Channel Form Changes	L	Adults are more open water userssimilar to longfin smelt. Not dependent on channel form as habitat.
Water Quality	Н	Definitive evidence of effects of toxics, copper loading. Shows impacts on tissue for Hg, PCBs, pesticides. This is a high concern, but no evidence for population effects. Pesticides in Delta and upstream are a risk to larvae and juveniles.
Water Temperature	L	No evidence of problem.
Undesirable Species Interactions	M	Food chain effects.
Adverse Fish and Wildlife Harvest Impacts	Н	Poaching and sport fishing. Based on tag returns, sport fishing only takes about 10-20% annually. This is not believed to be excessive.
Land use	L	Related to water quality.
Artificial Propagation of Fish and Assoc. Pop. Mgmt.	N/A	Not of concern. Not a genetics issue, since the species is introduced.
Human Disturbance	L	No evidence of a problem.
Wildfire	N/A	

Comment-- Why do striped bass eggs/larvae need transport flow to the Delta when there is no recognition of a similar need for American shad that have a similar behavior (broadcast spawners in mainstem and tributaries) but spawn later than striped bass and still rear (successfully?) in the Delta?



SECONDARY SPECIES: AMERICAN SHAD (CVPIA)

STRESSORS

RANK

COMMENTS

SIKESSUKS	KAI	COMMENTS
Alteration of Flows	Н	Attraction flow into spawning areas, entrainment in diversions is a concern in all areas.
Floodplain and Marshplain Changes	L	Do not use floodplain or marshplain.
Channel Form Changes	ML	Like shallows for rearing.
Water Quality	ML	Duration of exposure is high for juveniles rearing in Delta, but the relationship of rearing success to water quality is unknown. Pesticides and unknown toxicity in Delta and tributaries are a low risk to d/s migrants and rearing, since this species quickly moves out of the system.
Water Temperature	L	Not a problem with this species.
Undesirable Species Interactions	L	None known.
Adverse Fish and Wildlife Harvest Impacts	L	Angling does not appear to be a population level impact, but local harvest can be very high. Subject to harvest for a relatively short phase of life history.
Land use	L	Related to water quality.
Artificial Propagation of Fish and Assoc. Pop. Mgmt.	N/A	
Human Disturbance	L	No evidence of a problem.
Wildfire	N/A	



SECONDARY SPECIES: SACRAMENTO FALL-RUN (CVPIA)

STRESSORS

RANK

COMMENTS

Alteration of Flows	Н	Same stressors as other salmonentrainment and migration barriers.
Floodplain and Marshplain Changes	Н	Benefits to instream habitat and large woody debris.
Channel Form Changes	Н	Concerns with gravel, meander, shallow water habitat changes. Shallow water rearing, uses riparian habitat.
Water Quality	M	Iron Mountain Mine a concern, but also uses more than just mainstem so impact not as significant. Pesticides and unknown toxicity in Delta and lower portion of tributaries are a risk to d/s migrants.
Water Temperature	H	Problem in early fall for adults and egg-to-larval life stages, and also juveniles migrating downstream in late spring.
Undesirable Species Interactions	L	Not an issue.
Adverse Fish and Wildlife Harvest Impacts	M/H	Problems with hatchery production of other species-high hatchery production leads to high harvest of fall-run.
Land use	M	Also uses same as Spring-run and steelhead.
Artificial Propagation of Fish	Н	Straying impacts on naturally producing populations.
Human Disturbance	L	Instream disturbance. Some concern in certain watersheds.
Wildfire	L	Some concern in certain watersheds.



Attachment D Terms and Conditions for State (CALFED) Funds

This section provides contract terms and conditions applicable to contracts issued in this budget category/topic. The specific terms and conditions may vary, depending on the applicant category (State entities, Federal and other public entities, non-profit organizations, and private entities), and the type of project (Public Works/Construction or Services), as identified in Table D-1.

Specific documents that should be submitted with the proposal are shown in Table D-1.

The general terms and conditions which will apply to Category III contracts funded with Proposition 204 funding are provided below.

In addition to these general terms and conditions, specific additional standard clauses will be applicable depending on the type of project and applicant category. Table D-1 provides a summary of those standard clauses for different types of projects and different applicant categories. Those standard clauses are provided at the end of this attachment.

- 1. Term of Contract: The term of the agreement will be dependent on the project and may range from 1 to 3 years. The agreement shall not become effective until fully executed by the parties and approved by CALFED.
- 2. Payment Schedule: No funds will be disbursed by State or NFWF to Contractor without 1) an executed copy of the Contract, (2) receipt of an original invoice with supporting documentation, and (3) receipt and satisfactory completion of deliverables and/or phases of work as set forth in the agreement, including quarterly financial and programmatic reports. Payments shall be in arrears on a monthly basis or after completion of agreed-upon project phases.
- 3. Budget Variances: Variances which exceed ten percent of a project task's approved budgeted amount should have approval in advance, with written explanations of programmatic changes to cover such variances and to remain within the maximum contract amount.
- 4. Subcontracts: Contractors are responsible for all subcontracted work. Subcontract terms and conditions should include all applicable contract terms and conditions as presented herein. Subcontractor agreements require approval by the State or NFWF, unless the subcontract is already a part of the contract agreement. Any amendments to subcontract should be approved by the State or NFWF. In obtaining subcontracts, contractor should obtain at least 3 competitive bids, or comply with the provisions of Government Code 4525 et seq., as applicable, or provide written justification for non-compliance with these requirements.



- 5. Substitution: Should the State or NFWF be dissatisfied with the work of subcontractors or employees of the contractor, the State or NFWF may require the contractor to substitute different qualified subcontractors or employees. The State or NFWF must approve such substitutions in advance of providing applicable services.
- 6. Conflict of Interest: Contractor shall comply with all applicable State laws and rules pertaining to conflict of interest, including but not limited to Government Code 1090 and Public Contract Code 10410 and 10411.
- 7. Standard of Professionalism: Contractor shall conduct all work consistent with the professional standards for the industry and type of work being performed under the contract.
- 8. Rights in Data: All data and information obtained and/or received under contract shall be in the public domain. Contractor shall have the right to disclose, disseminate and use, in whole or part, any final form data and information received, collected and developed under this agreement, subject to inclusion of appropriate acknowledgment of credit to the State or NFWF, CALFED, and all cost sharing partners for their financial support. Use of draft data requires pre-approval by State or NFWF and CALFED. Contractor shall not sell or grant rights to a third party who intends to sell such product as a profit-making venture.
- 9. Indemnification: The Contractor agrees to indemnify, defend and save harmless the State or NFWF, CALFED Agencies, the Resources Agency, or Department of Water Resources, its officers, agents and employees from any and all claims and losses accruing or resulting to any or all contractors, subcontractors, material persons, laborers, and any other person, firm or corporation furnishing or supplying work services, materials or supplies in connection with the performance of this contract, and from any and all claims and losses accruing or resulting to any person, firm or corporation who may be injured or damaged by the Contractor in the performance of this contract.
- 10. Independent Status: The Contractor, and the officers, agents and employees of Contractor, in the performance of the contract, shall act in an independent capacity and not as officers or employees or agents of the State of California, NFWF, CALFED Agencies, the Resources Agency, or Department of Water Resources.
- 11. Termination Clause: The State or NFWF may terminate this agreement and be relieved of the payment of any consideration to Contractor should Contractor fail to perform the covenants herein contained at the time and in the manner herein provided. In the event of such termination the State or NFWF may proceed with the work in any manner deemed proper by the State. The cost to the State shall be deducted from any sum due the Contractor under this agreement, and the balance, if any shall be paid the Contractor upon demand.
- 12. Assignment: Without the written consent of the State, this agreement is not assignable by Contractor either in whole or in part.



- 13. Integration Clause: No alteration or variation of the terms of this contract shall be valid unless made in writing and signed by the parties hereto, and no oral understanding or agreement not incorporated herein, shall be binding on any of the parties hereto. This contract may be amended upon mutual written agreement of the parties and approved by State or NFWF and CALFED.
- 14. Consideration: The consideration to be paid Contractor as provided herein, shall be in compensation for all of the Contractor's expenses incurred in the performance hereof, including travel and per diem, unless otherwise expressly so provided.
- 15. Severability: If any provision of this contract is held invalid or unenforceable by any court of final jurisdiction, it is the intent of the parties that all other provisions of this contract be construed to remain fully valid, enforceable, and binding on the parties.



Table D-1: Standard Contract Clauses and Related Proposal Submittal Requirements

	Standard Clauses and Proposal Requirements (see Note 1)	Services/Consulting/Preconstruction/ Research Public Works/Construction			tion				
Item (Note 2)		Agency*	Public*	Non- profit	Private	Agency*	Public*	Non- profit	Private
1	Public Entities		FC				FC		
2	Service and Consultant with Non Public Entity			FC	FC			FC	FC
3	Interagency	FC				FC			
4	Public Works						FC	FC	FC
5	Insurance Requirements						FC	FC	FC
6	Bidders Bond or other Security (if contract value > \$107,000) see Note 3							Р	P
7	Non-Discrimination Compliance		Р	P	P		P	P	P
8	Certificate of Insurance						FC	FC	FC
9	Payment Bond						FC	FC	FC
10	Non Collusion		Р	P	P				
11	Small Business Preference				P				P
n/a	Proof of Contractor's License							P	P

Note 1: All contract terms apply to any subcontracts made by contractor.

Note 2: Item numbering refers to the copies of the documents as attached following this table.

Note 3: Types of security include cashiers check, cash, certified check or bidder's bond in an amount equal to 10 percent of the amount of the proposal.

* Agency: State of California agencies, including State (California) Universities.

Public: Federal agencies and other public entities, such as city, county, other local government entities, resource conservation districts, and out-of-state public universities.



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Agreement No.	
Exhibit	

STANDARD CLAUSES --CONTRACTS WITH PUBLIC ENTITIES

Workers' Compensation Clause. Contractor affirms that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that Code, and Contractor affirms that it will comply with such provisions before commencing the performance of the work under this contract.

Claims Dispute Clause. Any claim that Contractor may have regarding the performance of this agreement including, but not limited to, claims for additional compensation or extension of time, shall be submitted to the Executive Director, CALFED Bay-Delta Program or its designee within thirty days of its accrual, State, NFWF and Contractor shall then attempt to negotiate a resolution of such claim and process an amendment to this agreement to implement the terms of any such resolution.

Nondiscrimination Clause. During the performance of this contract, the recipient, contractor and its subcontractors shall not deny the contract's benefits to any person on the basis of religion, color, ethnic group identification, sex, age, physical or mental disability, nor shall they discriminate unlawfully against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, mental disability, medical condition, marital status, age (over 40), or sex. Contractor shall insure that the evaluation and treatment of employees and applicants for employment are free of such discrimination. Contractor shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12900 et seq.), the regulations promulgated thereunder (California Administrative Code, Title 2, Sections 7285.0 et seq.), the provisions of Article 9.5, Chapter 1, Part 1, Division 3, Title 2 of the Government Code (Government Code Sections 11135 - 11139.5), and the regulations or standards adopted by the awarding State agency to implement such article. Contractor or recipient shall permit access by representatives of the Department of Fair Employment and Housing and the awarding State agency upon reasonable notice at any time during the normal business hours, but in no case less than 24 hours notice, to such of its books, records, accounts, other sources of information and its facilities as said Department or Agency shall require to ascertain compliance with this clause. Recipient, contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement. The Contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the contract.

Availability of Funds. Work to be performed under this contract is subject to availability of Category III funds and through the State's normal budget process.

Audit Clause. The contracting parties shall be subject to the examination and audit of the Auditor General for a period of three years after final payment under the contract. (Government Code Section 10532).

Reimbursement Clause. If applicable, travel and per diem expenses to be reimbursed under this contract shall be at the same rates the State provides for unrepresented employees in accordance with the provisions of Title 2, Chapter 3, of the California Code of Regulations. Contractor's designated headquarters for the purpose of computing such expenses shall be:

Drug-Free Workplace Certification. By signing this contract, the contractor or grantee hereby certifies under penalty of perjury under the laws of the State of California that the contractor or grantee will comply with the requirements of the Drug-Free Workplace Act of 1990 (Government Code Section 8350 et seq.) and will provide a drug-free workplace by taking the following actions:

- 1. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations, as required by Government Code Section 835O(a).
- 2. Establish a Drug-Free Awareness Program as required by Government Code Section 8355(b), to inform employees about all of the following:
 - (a) The dangers of drug abuse in the workplace.
 - (b) The person's or organization's policy of maintaining a drug-free workplace,
 - (c) Any available counseling, rehabilitation and employee assistance programs, and
 - (d) Penalties that may be imposed upon employees for drug abuse violations.
- 3. Provide, as required by Government Code Section 8355(c), that every employee who works on the proposed contract:
 - (a) Will receive a copy of the company's drug-free policy statement, and
 - (b) Will agree to abide by the terms of the company's statement as a condition of employment on the contract.

Failure to comply with these requirements may result in suspension of payments under the contract or termination of the contract or both and the contractor or grantee may be ineligible for award of any future state contracts if the department determines that any of the following has occurred: (1) the contractor or grantee has made false certification, or (2) violates the certification by failing to carry out the requirements as noted above.

ITEM 2 (1 of 2)

Agr	eement No	
	Exhibit	

STANDARD CLAUSES— SERVICE & CONSULTANT SERVICE CONTRACTS FOR \$5,000 & OVER WITH NONPUBLIC ENTITIES

Workers' Compensation Clause. Contractor affirms that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self insurance in accordance with the provisions of that Code, and Contractor affirms that it will comply with such provisions before commencing the performance of the work under this contract.

Claims Dispute Clause. Any claim that Contractor may have regarding the performance of this agreement including, but not limited to, claims for additional compensation or extension of time, shall be submitted to the Director, Department of Water Resources, within thirty days of its accrual. State and Contractor shall then attempt to negotiate a resolution of such claim and process an amendment to this agreement to implement the terms of any such resolution.

National Labor Relations Board Clause. In accordance with Public Contract Code Section 10296, Contractor declares under penalty of perjury that no more than one final, unappealable finding of contempt of court by a federal court has been issued against the Contractor within the immediately preceding two-year period because of Contractor's failure to comply with an order of a federal court which orders Contractor to comply with an order of the National Labor Relations Board.

Nondiscrimination Clause. During the performance of this contract, the recipient, contractor and its subcontractors shall not deny the contract's benefits to any person on the basis of religion, color, ethnic group identification, sex, age, physical or mental disability, nor shall they discriminate unlawfully against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, mental disability, medical condition, marital status, age (over 40), or sex. Contractor shall insure that the evaluation and treatment of employees and applicants for employment are free of such discrimination. Contractor shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12900 et seq.), the regulations promulgated thereunder (California Administrative Code, Title 2, Sections 7285.0 et seq.), the provisions of Article 9.5, Chapter 1, Part 1, Division 3, Title 2 of the Government Code (Government Code Sections 11135 - 11139.5), and the regulations or standards adopted by the awarding State agency to implement such article. Contractor or recipient shall permit access by representatives of the Department of Fair Employment and Housing and the Awarding State agency upon reasonable notice at any time during the normal business hours, but in no case less than 24 hours notice, to such of its books, records, accounts, other sources of information and its facilities as said Department or Agency shall require to ascertain compliance with this clause. Recipient, contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement. The Contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the contract.

Statement of Compliance. The contractor's signature affixed hereon and dated shall constitute a certification under penalty of perjury under the laws of the State of California that the Contractor has, unless exempted, complied with the nondiscrimination program requirements of Government Code Section 12990 and Title 2, California Code of Regulations, Section 8103.

Performance Evaluation. Contractor's performance under this contract will be evaluated after completion. The evaluation will be filed with the Department of General Services.

Availability of Funds. Work to be performed under this contract is subject to availability of funds through the State's normal budget process.

Audit Clause. The contracting parties shall be subject to the examination and audit of the Auditor General for a period of three years after final payment under the contract. (Government Code Section 10532).

Reimbursement Clause. If applicable, travel and per diem expenses to be reimbursed under this contract shall be at the same rates the State provides for unrepresented employees in accordance with the provisions of Title 2, Chapter 3, of the California Code of Regulations. Contractor's designated headquarters for the purpose of computing such expenses shall be:

- **Drug-Free Workplace Certification**. By signing this contract, the contractor or grantee hereby certifies under penalty of perjury under the laws of the State of California that the contractor or grantee will comply with the requirements of the Drug-Free Workplace Act of 1990 (Government Code Section 8350 et seq.) and will provide a drug free workplace by taking the following actions:
 - 1. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations, as required by Government Code Section 8355(a).
 - 2. Establish a Drug-Free Awareness Program as required by Government Code Section 8355(b), to inform employees of all of the following:
 - (a) The dangers of drug abuse in the workplace,
 - (b) The person's or organization's policy of maintaining a drug-free workplace,
 - (c) Any available counseling, rehabilitation and employee assistance programs, and
 - (d) Penalties that may be imposed upon employees for drug abuse violations.
 - 3. Provide, as required by Government Code Section 8355(c), that every employee who works on the proposed contract or grant:
 - (a) Will receive a copy of the company's drug-free policy statement, and
 - (b) Will agree to abide by the terms of the company's statement as a condition of employment on the contract or grant.

Failure to comply with these requirements may result in suspension of payments under the contract or termination of the contract or both and the contractor or grantee may be ineligible for award of any future contracts if the department determines that any of the following has occurred: (1) the contractor or grantee has made false certification, or (2) violates the certification by failing to carry out the requirements as noted above.

Priority Hiring Considerations. For contracts in excess of \$200,000, the contractor shall give priority consideration in filling vacancies in positions funded by the contract to qualified recipients of aid under Welfare and Institutions Code Section 11200. (Public Contract Code Section 10353).

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Agreement No.
Exhibit

STANDARD CLAUSES - INTERAGENCY AGREEMENTS

Audit Clause. For contracts in excess of \$10,000, the contracting parties shall be subject to the examination and audit of the State Auditor for a period of three years after final payment under the contract. (Government Code Section 8546.7).

Availability of Funds. Work to be performed under this contract is subject to availability of Category III funds through the State's normal budget process.

Interagency Payment Clause. For services provided under this agreement, charges will be computed in accordance with State Administrative Manual Section 8752.

Termination Clause. Either State agency may terminate this contract upon 30 days advance written notice. The State agency providing the services shall be reimbursed for all reasonable expenses incurred up to the date of termination.

Agreement No	
Exhibit	

STANDARD CLAUSES-GENERAL CONDITIONS FOR PUBLIC WORKS CONTRACTS

LICENSE. No bidder may bid on work for which it is not properly licensed by the Contractor's State License Board. Joint Venture bidders must possess a Joint Venture License. Bidders for this Agreement must have classification(s) of contractor's license, provide license number and expiration date and certify under penalty of perjury that the foregoing is true and correct.

SUBCONTRACTORS. (See Public Contract Code Section 4104.) The bidder shall set forth in its bid: The name and business address of each subcontractor who will perform work or labor or render services in an amount in excess of one half of one percent (.5%) of the General Contractor's total bid; and The portion of work to be done by each subcontractor. (See Public Contract Code Section 4104.)

PAYMENT BOND. The Contractor shall furnish, concurrently with signing the contract, a Payment Bond to Accompany Construction Contract, Standard Form 807, in an amount not less than fifty percent (50%) of the amount of the contract when its bid exceeds \$5000. Such bond shall be executed by the Contractor and a corporate surety approved by the State.

NOTICE. Failure to obtain a payment bond upon presentation of contract for contractor signature shall cause the State to reject the bid.

WORKERS' COMPENSATION INSURANCE CERTIFICATION. Upon execution of the contract, the Contractor shall provide the State either with a certificate of insurance issued by an insurance carrier licensed to write workers' compensation insurance in the State of California, including the name of the carrier and date of expiration of the insurance, or a certificate of consent to self insure issued by the Director of the Department of Industrial Relations.

PREVAILING WAGE. It is hereby mutually agreed that the Contractor shall forfeit to the State a penalty of \$50 for each calendar day, or portion thereof, for each worker paid by it, or subcontractor under it, less than the prevailing wage so stipulated. In addition the Contractor further agrees to pay to each worker the difference between the actual amount paid for each calendar day, or portion thereof, and the stipulated prevailing wage rate for the same. This provision shall not apply to properly registered apprentices.

MAXIMUM HOURS. It is further agreed that the maximum hours a worker is to be employed without overtime pay is limited to 8 hours a day and 40 hours a week and the Contractor shall forfeit, as a penalty to the State, \$25 for each worker employed in the execution of the contract for each calendar day during which a worker is required or permitted to labor more than 8 hours in any calendar day or more than 40 hours in any calendar week in violation of Labor Code Sections 1810-1815, inclusive.

TRAVEL AND SUBSISTENCE PAYMENTS. Travel and subsistence payments shall be paid to each worker needed to execute the work, as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed in accordance with Labor Code Section 1773.8.

APPRENTICES. Properly registered apprentices may be employed in the prosecution of the work. Every such apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade at which he or she is employed, and shall be employed only at the work of the craft or trade to which he or she is registered. The Contractor and each subcontractor must comply with the requirements of Labor Code Section 1777.5 and any related regulations regarding the employment of registered apprentices.

SUBSTITUTIONS. Pursuant to Section 3400 of the Public Contract Code, should the Contractor seek to substitute a brand of materials other than specified, the Contractor shall submit data substantiating the request for substitution of "an equal" item. The substantiating data must be presented for approval within thirty-five (35) days after the award of the agreement. The State (NFWF) shall be the sole judge as to the comparative quality and suitability of "an equal" item.

ANTI-TRUST CLAIMS. The Contractor offers and agrees and will require all of his subcontractors and suppliers to agree to assign to the awarding body all rights, title, and interest in and to all causes of action they may have under Section 4 of the Clayton Act (15 U. S.C. Sec. 15) or under the Cartwright Act [Chapter 2 (commencing with Sec. 165700) of Part 2 of Division 7 of the Business and Professions Code], arising from purchases of goods, services, or materials, pursuant to the public works contract or the subcontract. The assignment made by the Contractor and all additional assignments made by the subcontractors and suppliers shall be deemed to have been made and will become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment or the necessity of tendering to the awarding body any written assignments.

If an awarding body receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Government Code Sections 4550-4554, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the public body any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the public body as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

Upon demand in writing by the assignor, the assignee shall, within one year from such demand, reassign the cause of action assigned under Government Code Sections 4550-4554, if the assignor has been or may have been injured by the violation of law for which the cause of action arose and (a) the assignee has not been injured thereby, or (b) the assignee declines to file a court action for the cause of action.

PROGRESS PAYMENTS

- a. Ten percent of any progress payments that may be provided for under this contract shall be withheld pending satisfactory completion of all services under the contract. The Contractor may substitute securities for such retentions and receive any interest accrued provided in Section 22300 of the Public Contract Code.
- b. No progress payments shall be made unless the Contractor, upon execution of the contract, furnishes a faithful performance bond for not less than one-half the total amount payable under the contract.

PAYROLL RECORDS. The Contractor and each subcontractor shall comply with Labor Code Section 1776 regarding payroll records.

NONCOLLUSION AFFIDAVIT. All bidders shall submit with their bids a signed and notarized Noncollusion Affidavit.

LABOR CODE PROVISIONS. Pursuant to Sections 1770 et seq. of the California Labor Code, the Director of the State Department of Industrial Relations has made the general prevailing wage determination covering the locality where work for this contract is to be performed. A copy of the publication General Prevailing Wage Rates is on file for inspection at the State Department of Water Resources, Contract Services Off1ce, 1416 Ninth Street, Sacramento, CA. The Contractor agrees to post a copy of the General Prevailing Wage Determination for the locality of each job site. The Contractor also agrees to comply with all requirements of the California Labor Code and to pay the forfeiture penalties and monies which may become due as provided in Sections 1775 and 1813 of that Code.

UNDOCUMENTED ALIENS. No bidder or Contractor shall be eligible to bid for or receive a public works or purchase contract, who has, in the preceding five years, been convicted of violating a State or federal law respecting the employment of undocumented aliens.

Agreement No _	
Exhibit	

STANDARD CLAUSES - INSURANCE REQUIREMENTS

Contractor shall furnish to the State (NFWF) a certificate of insurance stating that there is liability insurance presently in effect for the contractor of not less than SI,000,000 per occurrence for bodily injury and property damage liability combined.

The certificate of insurance must include the following provisions:

- I. The insurer will not cancel the insured's coverage without 30 days' prior written notice to the State.
- 2. The State of California (NFWF), its officers, agents, employees, and servants are included as additional insured, but only insofar as the operations under this contract are concerned.

Contractor agrees that the bodily injury liability insurance herein provided for shall be in effect at all times during the term of this contract. In the event said insurance coverage expires at any time or times during the time of this contract, contractor agrees to provide at least thirty (30) days prior to said expiration date, a new certificate of insurance evidencing insurance coverage as provided for herein for not less than the remainder of the term of the contract, or for a period of not less than one (I) year. New certificates of insurance are subject to the approval of the Department of General Services and contractor agrees that no work or services shall be performed prior to the giving of such approval. In the event contractor fails to keep in effect at all times insurance coverage as herein provided, State (NFWF) may, in addition to any other remedies it may have, terminate this contract upon the occurrence of such event.

BIDDER'S BOND

We	
	as PRINCIPAL, and
as SURETY, are held and firmly bound unto the State of California in the penal sum of TI (10%) OF THE TOTAL .AMOUNT OF THE BID of the Principal above named submitted the State of California, acting by and through the Resources Agency, for the work describ payment of which sum in lawful money of the United States, well and truly to be made, to the Resources Agency to which said bid was submitted, we bind ourselves, our heirs, exadministrators and successors, jointly and severally, firmly by these presents.	by said Principal to bed below, for the the Secretary of
In no case shall the liability of the surety here under exceed the sum of \$	
THE CONDITION OF THIS OBLIGATION IS SUCH, That whereas the Principal has submitted the above-mentioned bid to the State of aforesaid, for certain construction specifically described for	-
NOW, THEREFORE, If the aforesaid Principal is awarded the contract and, within the required under the apecifications, after the prescribed forms are presented to him for signal written contract, in the prescribed form, in accordance with the bid, and files two bonds Department, one to guarantee faithful performance and the other to guarantee payment as required by law, then this obligation shall be null and void; otherwise, it shall be and read virtue. IN WITNESS WHEREOF, We have hereunto set our hands and seals on thisday of	nature, enters into with the for labor materials,
	(Seal)
	(Seal)
	(Seal)
Principal	(Seal)
	(Seal)
Surety	(Seal)
Address	(Seal)

NOTE: Signatures of those executing for the surety must be properly acknowledged.

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specifically exempted, compliance with Government Regulations, Title 2, Division 4, Chapter 5 in development, implementation and maintenance of agrees not to unlawfully discriminate, harass or all employment because of sex, race, color, ancestry	to as "prospective contractor") hereby certifies, unless nent Code Section 12990 (a-f) and California Code of matters relating to reporting requirements and the fa Nondiscrimination Program. Prospective contractor low harassment against any employee or applicant for religious creed, national origin, disability (including marital status, denial of family and medical care leave
CERT	TFICATION
contractor to the above described certification. I	I am duly authorized to legally bind the prospective am fully aware that this certification, executed on the lty of perjury under the laws of the State of California.
FFICIAL'S NAME	
ATE EXECUTED	EXECUTED IN THE COUNTY OF
POSPECTIVE CONTRACTOR'S SIGNATURE	
ROSPECTIVE CONTRACTOR'S TITLE	
ROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME	

CERTIFICATE OF INSURANCE

Bidder:			and	and a	tate of Californi II officers and oyees thereof
	ormed under Contract #		ation #		

e Correrage	Company & Policy #	Mo.	Term Day	Year	Limits of Liability
()			to		
			to		
			to		
)					
))			to		
It is further certified th	at:				
The policy(ies) become(s) effective Contract.	ective not later than the time of	commencement of	work u	nder the	aforementioned
The policy(ies) name(s), as ad	ditional insured with the bidder, th	ne State and all offi	cers an	d employ	yees of the State
The minimum limits of	coverage of the aforementioned in	nsureds are as follo	ws:		
Combined Siz	ngle Limit	\$ (eac	ch occu	rrence)	-
•					

Under the terms of the policy(ies):

- a. The insurer(s) shall not cancel or modify the policy(ies) without 30 days' prior written notice to the Director of the Department of Water Resources.
- b. The State is not responsible for any premiums or assessments on the policy(ies).

At Dated:	
	Insurers Authorized Representative (Signature)
	Insurer or Insurance Organization
	Address
	Phone No.
B) Dated:	Insurers Authorized Representative Signature)
,	* Insurer or Insurance Organization
	Address
•	Phone No.
C) Dated:	Insurers Authorized Representative (Signature)
	* Insurer or Insurance Organization
	Address
	Phone No.
D) Dated:	Insurers Authorized Representative (Signature)
	* Insurer or Insurance Organization
	Address
	Phone No.

*Must be California-admitted insurer or qualified non-admitted insurer as defined in California Insurance Code.

ITEM 9

PAYMENT BOND TO ACCOMPANY CONSTRUCTION CONTRACT

(CIVIL CODE SECTION 3247)

	BOND NO.
The premium on this bond is	for the term
Know A	all Men By These Presents:
That The State of California, acting by and through the	•
has awarded to	whose address is
	TRACTOR / PRINCIPLE)
	as Principle, a contract for the work described as follows:
WHEREAS, The provisions of Civil Code Section 3247 requires executed and tendered in accordance therewith.	ire that the Principle file a bond in connection with said contract and this bond
NOW THEREFORE, Principle and	, a corporation organized
under the laws of	(SURETY), and authorized to transact a general surety business
	ly bound to the People of the State of California in the penal sum of
	ssors and assigns jointly and severally, firmly by these presents.
, , , , , , , , , , , , , , , , , , , ,	- colo mas masgas joune, and colored, the colored processes
THE CONDITION O	OF THIS OBLIGATION IS SUCH,
amounts required to be deducted, withheld, and paid of employees of the Principle and subcontractors pursuant to such work and labor, that the Surety herein will pay brought upon this bond, the Surety will pay a reasonable 2. This bond shall insure to the benefit of any persuch persons or their assigns in any suit brought upon th 3. The aggregate liability of the Surety hereunder, exceed the penal sum of the bond in accordance with the 4. This bond is executed by the Surety, to comply w Code and of Chapter 2, Title 14, Part 2 of the Code of provisions thereof. 5. This bond may be cancelled by the Surety in acc Civil Procedure.	sons named in Civil Code Section 3181 as to give a right of action to
(NAME OF SURETY)	(ADDRESS)
I certify (or declare) under penalty of periury that I have	executed the foregoing bond under an unrevoked power of attorney.
Executed in(CITY AND STATE)	
(CITY AND STATE)	On (DATE)
under the laws of the State of California.	
	•
	(SIGNATURE OF ATTORNEY IN FACT)
	(PRINTED OR TYPED NAME OF ATTORNEY IN FACT)

ITEM 10

Agreement No.

Exhibit _____

being first duly sworn, deponsition title) (the bidder) (the bidder) (that the bid is not made in the interest of the artnership, company, association, organine and not collusive or sham; that the dor solicited any other bidder to put in irectly colluded, conspired, connived, or in a sham bid, or that anyone shall refra any manner, directly or indirectly, some erence with anyone to fix the bid price
chat the bid is not made in the interest of the and not collusive or sham; that the d or solicited any other bidder to put in irectly colluded, conspired, connived, or in a sham bid, or that anyone shall refra any manner, directly or indirectly, sou
osition title) (the bidder) that the bid is not made in the interest of artnership, company, association, organ ine and not collusive or sham; that the d or solicited any other bidder to put in irectly colluded, conspired, connived, or in a sham bid, or that anyone shall refra any manner, directly or indirectly, sou
that the bid is not made in the interest of artnership, company, association, organ ine and not collusive or sham; that the d or solicited any other bidder to put in irectly colluded, conspired, connived, or in a sham bid, or that anyone shall refra any manner, directly or indirectly, sou
that the bid is not made in the interest of artnership, company, association, organ ine and not collusive or sham; that the d or solicited any other bidder to put in irectly colluded, conspired, connived, or in a sham bid, or that anyone shall refra any manner, directly or indirectly, sou
that the bid is not made in the interest of artnership, company, association, organ ine and not collusive or sham; that the d or solicited any other bidder to put in irectly colluded, conspired, connived, or in a sham bid, or that anyone shall refra any manner, directly or indirectly, sou
that the bid is not made in the interest of the rest o
ertnership, company, association, organine and not collusive or sham; that the d or solicited any other bidder to put in irectly colluded, conspired, connived, or in a sham bid, or that anyone shall refra any manner, directly or indirectly, sou
any overhead, profit, or cost element of, or to secure any advantage against the ne interested in the proposed contract; e true; and, further, that the bidder her her bid price or any breakdown thereo ation or data relative thereto, or paid, a artnership, company, association, organ or agent thereof to effectuate a collu
By(person signing for bidder)
Subscribed and sworn to before me o
(Notary Public)

Attachment E Terms and Conditions for Federal (Interior) Funds



U.S. Department of the Interior

Certifications Regarding Debarment, Suspension and Other Responsibility Matters, Drug-Free Workplace Requirements and Lobbying

Persons signing this form should refer to the regulations referenced below for complete instructions:

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions - The prospective primary participant further agrees by submitting this proposal that it will include the clause titled, "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. See below for language to be used or use this form for certification and sign. (See Appendix A of Subpart D of 43 CFR Part 12.)

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions - (See Appendix B of Subpart D of 43 CFR Part 12.)

Certification Regarding Drug-Free Workplace Requirements -Alternate I. (Grantees Other Than Individuals) and Alternate II. (Grantees Who are Individuals) - (See Appendix C of Subpart D of 43 CFR Part 12)

Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of the Interior determines to award the covered transaction, grant, cooperative agreement or loan.

PART A: Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

CHECK__IF THIS CERTIFICATION IS FOR A PRIMARY COVERED TRANSACTION AND IS APPLICABLE.

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

PART 8: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions

CHECK__IF THIS CERTIFICATION IS FOR A LOWER TIER COVERED TRANSACTION AND IS APPLICABLE.

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

DI-2010 June 1995 (This form replaces DI-1953, DI-1954, DI-1955, DI-1958 and DI-1963)

	CHECKIF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS NOT AN INDIVIDUAL.
Alternat	e I. (Grantees Other Than Individuals)
A. The	grantee certifies that it will or continue to provide a drug-free workplace by:
(a)	Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
(b)	Establishing an ongoing drug-free awareness program to inform employees about— (1) The dangers of drug abuse in the workplace; (2) The grantee's policy of maintaining a drug-free workplace; (3) Any available drug counseling, rehabilitation, and employee assistance programs; and (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
(c)	Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
(d)	Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will — (1) Abide by the terms of the statement; and (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
(e)	Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification numbers(s) of each affected grant;
(f)	Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted — (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
(g)	Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a) (b), (c), (d), (e) and (f).
B. The g specific	grantee may insert in the space provided below the site(s for the performance of work done in connection with the grant:
Place of	Performance (Street address, city, county, state, zip code)
	
Check	if there are workplaces on file that are not identified here.
PART D:	Certification Regarding Drug-Free Workplace Requirements
	CHECKIF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS AN INDIVIDUAL.
Alternate	II. (Grantees Who Are Individuals)

- (a) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant;
- (b) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to the grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

Di-2010 June 1995 (This form replaces Di-1963, Di-1964, Di-1966, Di-1966 and Di-1963) PART E: Certification Regarding Lobbying
Certification for Contracts, Grants, Loans, and Cooperative Agreements

CHECK__IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND THE AMOUNT EXCEEDS \$100,000: A FEDERAL GRANT OR COOPERATIVE AGREEMENT; SUBCONTRACT, OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT.

CHECK__IF CERTIFICATION IS FOR THE AWARD OF A FEDERAL LOAN EXCEEDING THE AMOUNT OF \$150,000, OR A SUBGRANT OR SUBCONTRACT EXCEEDING \$100,000, UNDER THE LOAN.

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

As the authorized certifying official, I hereby certify that the above specified certifications are true.					
,					
SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL					
TYPED NAME AND TITLE					
DATE					

DI-2010 June 1896 (This form replaces DI-1963, DI-1964, DI-1966, DI-1968 and DI-1963)

Standard Form 424

OMB Approval No. 0348-0043 APPLICATION FOR 2. DATE SUBMITTED FEDERAL ASSISTANCE Applicant Identified 1. TYPE OF SUBMISSION: 3. DATE RECEIVED BY STATE State Application Identifier Preapplication Application N/A Construction ☐ Construction 4. DATE RECEIVED BY FEDERAL AGENCY Federal Identifier □ Non-Construction ☐ Non-Construction 5. APPLICANT INFORMATION Organizational Unit: Legal Name: Address (give ally, county, state, and zip code): Name and telephone number of person to be contacted on matters involving this application (give area code) 7. TYPE OF APPLICANT: (enter appropriate letter in box) 6. EMPLOYER IDENTIFICATION NUMBER (EW): A. State B. County H. Independent School Dist. 1. State Controlled Institution of Higher Learning 8. TYPE OF APPLICATION: J. Private University С Municipal O Township K. Jodian Tribe ☐ Continuation C Revision T New Interstate L. Individual M. Profit Organization Intermunicipal G Special District N. Other (Specify) If Revision, enter appropriate letter(s) in box(es) A. Increase Award B. Decrease Award C. Increase Duration D. Decrease Duration Other (specify): 9. NAME OF FEDERAL AGENCY: 10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: 11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: N/A 12. AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.): 13. PROPOSED PROJECT 14. CONGRESSIONAL DISTRICTS OF: Start Date **Ending Date** a. Applicant 15. ESTIMATED FUNDING: 16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS? a. Federal 00 2 a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE b Applicant 2 00 TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: c State 2 ΔO DATE d Local \$.00 b. NO. D PROGRAM IS NOT COVERED BY E.O. 12372 e Other 2 00 O OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW I Program Income \$. 00 17. IS THE APPLICANT DEUNQUENT ON ANY FEDERAL DEBT? g. TOTAL 00 O Yes If "Yes," attach an explanation C No 18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED. a Type Name of Authorized Representative b. Title c. Telephone Number d Signature of Authorized Representative e. Date Signed Previous Edition Usable Standard Form 424 (REV. 4-82) Authorized for Local Reproduction Prescribed by OMB Circular A-102

Standard Form 424 (cont'd.)

INSTRUCTIONS FOR THE SF 424

Public reporting burden for this collection of information is estimated to average 45 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget. Paperwork Reduction Project (0348-0043), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET, SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

This is a standard form used by applicants as a required facesheet for preapplications and applications submitted for Federal assistance. It will be used by Federal agencies to obtain applicant certification that States which have established a review and comment procedure in response to Executive Order 12372 and have selected the program to be included in their process, have been given an opportunity to review the applicant's submission.

liem:

Entry:

- 1. Self-explanatory.
- Date application submitted to Federal agency (or State if applicable) & applicant's control number (if applicable).
- 3. State use only (if applicable).
- If this application is to continue or revise an existing award, enter present Federal identifier number. If for a new project, leave blank.
- Legal name of applicant, name of primary organizational unit which will undertake the assistance activity, complete address of the applicant, and name and telephone number of the person to contact on matters related to this application.
- Enter Employer Identification Number (EIN) as assigned by the Internal Revenue Service.
- 7 Enter the appropriate letter in the space provided.
- Check appropriate box and enter appropriate letter(s) in the space(s) provided:
 - "New" means a new assistance award.
 - "Continuation" means an extension for an additional funding/budget period for a project with a projected completion date.
 - "Revision" means any change in the Federal Government's financial obligation or contingent liability from an existing obligation.
- 9 Name of Federal agency from which assistance is being requested with this application.
- Use the Catalog of Federal Domestic Assistance number and title of the program under which assistance is requested.
- 11. Enter a brief descriptive title of the project. If more than one program is involved, you should append an explanation on a separate sheet. If appropriate (e.g., construction or real property projects), attach a map showing project location. For preapplications, use a separate sheet to provide a summary description of this project.

Item:

Entry:

- List only the largest political enuties affected (e.g., State, counties, cities).
- 13. Self-explanatory.
- List the applicant's Congressional District and any District(s) affected by the program or project.
- 15. Amount requested or to be contributed during the first funding/budget period by each contributor. Value of inkind contributions should be included on appropriate lines as applicable. If the action will result in a dollar change to an existing award, indicate only the amount of the change. For decreases, enclose the amounts in parentheses. If both basic and supplemental amounts are included, show breakdown on an attached sheet. For multiple program funding, use totals and show breakdown using same categories as item 15.
- Applicants should contact the State Single Point of Contact (SPOC) for Federal Executive Order 12372 to determine whether the application is subject to the State intergovernmental review process.
- This question applies to the applicant organization, not the person who signs as the authorized representative.
 Categories of debt include delinquent audit disallowances, loans and taxes.
- 18. To be signed by the authorized representative of the applicant. A copy of the governing body's authorization for you to sign this application as official representative must be on file in the applicant's office. (Certain Federal agencies may require that this authorization be submitted as part of the application.)

SF 424 Back (Rev.

Figure 2
Standard Form 424A (cont'd.)

	SECTION C		IRCES	24	
(a) Grant Program		(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8.		\$	\$	\$	\$.
10.					
11.					
12. TOTAL (sum of lines 8 – 11)		\$	\$	\$	\$
FACULARY PA	SECTION	D - FORCASTED CASH N	EEDS		
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$	\$	\$	\$	\$
14. NonFederal					
15. TOTAL (sum of lines 13 and 14)	\$	\$	\$	S	\$
SECTION E	BUDGET ESTIMATES OF F	EDERAL FUNDS NEEDE	D FOR BALANCE OF THE	The second secon	
(a) Grant Program		(b) First	FUTURE FUND (c) Second	ING PERIODS (Years) (d) Third	(e) Fourth
16.		\$	\$	\$	\$
17.					
18.					
19.				·	
20. TOTAL (sum of lines 16-19)		 \$	\$	\$	\$
	SECTION	OTHER BUDGET INFOR			
21 Direct Charges:		22. Indirect	Charges:		
23. Remarks:		·			

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Standard Form 424A (Rev. 4-92) Page 2

1-000181

Figure 2 Standard Form 424A

BUDGET INFORMATION - Non-Construction Programs

OMB Approval No. 0348-0044

				RY Program		g u
Grant Program Function	Catalog of Federal Domestic Assistance		obligated Funds		t	
or Activity (a)	Number (b)	Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (I)	Total (g)
		\$	\$	\$	\$	\$
i. Totals		\$	\$	\$	\$	\$
		E NAME & SECTION	HB BUDGET CATEGO	RIES CONTROL OF ACTIVITY		Total
6. Object Class Categorie)\$	(1)	(2)	(3)	(4)	(5)
a. Personnel		•	*	\$		\$
b. Fringe Benefit	s .					
c. Travel						
d. Equipment						
e. Supplies						
f. Contractual						
g. Construction						
h. Other			·			
i. Total Direct Ch	narges (sum of 6a-6h)					
j. Indirect Charg	ges					
k. TOTALS (sum	, ,	\$	\$.	\$	\$
7. Program Income		\$!	\$	\$	\$

Standard Form 424A (cont'd.)

INSTRUCTIONS FOR THE SF-424A

Public reporting burden for this collection of information is estimated to average 180 minutes per response, including time for reviewing instructions; searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0044), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET, SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

General Instructions

This form is designed so that application can be made for funds from one or more grant programs. In preparing the budget, adhere to any existing Federal grantor agency guidelines which prescribe how and whether budgeted amounts should be separately shown for different functions or activities within the program. For some programs, grantor agencies may require budgets to be separately shown by function or activity. For other programs, grantor agencies may require a breakdown by function or activity. Sections A, B, C, and D should include budget estimates for the whole project except when applying for assistance which requires Federal authorization in annual or other funding period increments. In the latter case, Sections A, B. C. and D should provide the budget for the first budget period (usually a year) and Section E should present the need for Federal assistance in the subsequent budget periods. All applications should contain a breakdown by the object class categories shown in Lines a-k of Section B.

Section A. Budget Summary Lines 1-4 Columns (a) and (b)

For applications pertaining to a single Federal grant program (Federal Domestic Assistance Catalog number) and not requiring a functional or activity breakdown, enter on Line 1 under Column (a) the catalog program title and the catalog number in Column (b).

For applications pertaining to a single program requiring budget amounts by multiple functions or activities, enter the name of each activity or function on each line in Column (a), and enter the catalog number in Column (b). For applications pertaining to multiple programs where none of the programs require a breakdown by function or activity, enter the catalog program title on each line in Column (a) and the respective catalog number on each line in Column (b).

For applications pertaining to multiple programs where one or more programs require a breakdown by function or activity, prepare a separate sheet for each program requiring the breakdown. Additional sheets should be used when one form does not provide adequate space for all breakdown of data required. However, when more than one sheet is used, the first page should provide the summary totals by programs

Lines 1-4, Columns (c) through (g)

For new applications, leave Columns (c) and (d) blank. For each line entry in Columns (a) and (b), enter in Columns (e), (f), and (g) the appropriate amounts of funds needed to support the project for the first funding period (usually a year).

For continuing grant program applications, submit these forms before the end of each funding period as required by the grantor agency. Enter in Columns (c) and (d) the estimated amounts of funds which will remain unobligated at the end of the grant funding period only if the Federal grantor agency instructions provide for this. Otherwise, leave these columns blank. Enter in columns (e) and (f) the amounts of funds needed for the upcoming period. The amount(s) in Column (g) should be the sum of amounts in Columns (e) and (f).

For supplemental grants and changes to existing grants, do not use Columns (c) and (d). Enter in Column (e) the amount of the increase or decrease of Federal funds and enter in Column (f) the amount of the increase or decrease of non-Federal funds. In Column (g) enter the new total budgeted amount (Federal and non-Federal) which includes the total previous authorized budgeted amounts plus or minus, as appropriate, the amounts shown in Columns (e) and (f). The amount(s) in Column (g) should not equal the sum of amounts in Columns (e) and (f).

Line 5—Show the totals for all columns used.

Section B Budget Categories

In the column headings (I) through (4), enter the titles of the same programs, functions, and activities shown on Lines 1-4. Column (a), Section A. When additional sheets are prepared for Section A, provide similar column headings on each sheet. For each program, function or activity, fill in the total requirements for funds (both Federal and non-Federal) by object class categories.

Lines 6a-i—Show the totals of Lines 6a to 6h in each column.

Line 6j - Show the amount of indirect cost.

Line 6k. Enter the total of amounts on Lines 6i and 6j. For all applications for new grants and continuation grants the total amount in column (5), Line 6k, should be the same as the total amount shown in Section A. Column (g). Line 5. For supplemental grants and changes to grants, the total amount of the increase or decrease as shown in Columns (1)-(4), Line 6k should be the same as the sum of the amounts in Section A, Columns (e) and (f) on Line 5.

Line 7 - Enter the estimated amount of income, if any, expected to be generated from this project. Do not add or subtract this amount from the total project amount. Show under the program

SF 424A (Rev. 4-92) Page 3

Standard Form 424A (cont'd.)

INSTRUCTIONS FOR THE SF-424A (continued)

narrative statement the nature and source of income. The esumated amount of program income may be considered by the federal grantor agency in determining the total amount of the grant.

Section C. Non-Federal Resources

Lines 8-11 Enter amounts of non-Federal resources that will be used on the grant. If in-kind contributions are included, provide a brief explanation on a separate sheet.

Column (a) - Enter the program titles identical to Column (a). Section A. A breakdown by function or activity is not necessary.

Column (b) - Enter the contribution to be made by the applicant.

Column (c) - Enter the amount of the State's cash and in-kind contribution if the applicant is not a State or State agency. Applicants which are a State or State agencies should leave this column blank.

Column (d) - Enter the amount of cash and in-kind contributions to be made from all other sources.

Column (e) - Enter totals of Columns (h), (c), and (d).

Line 12—Enter the total for each of Columns (b)-(e). The amount in Column (e) should be equal to the amount on Line 5, Column (f) Section A.

Section D. Forecasted Cash Needs

Line 13 - Enter the amount of cash needed by quarter from the grantor agency during the first year.

Line 14 - Enter the amount of each from all other sources needed by quarter during the first year.

Line 15 - Enter the totals of amounts on Lines 13 and 14.

Section E. Budget Estimates of Federal Funds Needed for Balance of the Project

Lines 16-19 - Enter in Column (a) the same grant program titles shown in Column (a), Section A. A breakdown by function or activity is not necessary. For new applications and continuation grant applications, enter in the proper columns amounts of Federal funds which will be needed to complete the program or project over the succeeding funding periods (usually in years). This section need not be completed for revisions (amendments, changes, or supplements) to funds for the current year of existing grants.

If more than four lines are needed to list the program titles, submit additional schedules as necessary.

Line 20 - Enter the total for each of the Columns (b)-(e). When additional schedules are prepared for this Section, annotate accordingly and show the overall totals on this line.

Section F. Other Budget Information

Line 21 - Use this space to explain amounts for individual direct object-class cost categories that may appear to be out of the ordinary or to explain the details as required by the Federal grantor agency.

Line 22 - Enter the type of indirect rate (provisional, predetermined, final or fixed) that will be in effect during the funding period, the estimated amount of the base to which the rate is applied, and the total indirect expense.

Line 23 - Provide any other explanations or comments deemed necessary.

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Standard Form 424B

OMB Approval No 0348-0040

ASSURANCES — NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET, SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program, If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant I certify that the applicant:

- Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
- Will give the awarding agency, the Comptroller General of United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
- Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
- Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
- Will comply with the Intergovernmental Personnel Act of 1970 (42 U. S. C. §4728-4763) relating to prescribed standards for merit systems for programs funded under one of the nineteen statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C. F. R. 900, Subpart F).
- 6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin. (b) Title IX of the Education Amendments of 1972, as amended (20 U. S. C. §1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex. (c) Section 504 of the Rehabilitation.

- Act of 1973, as amended (29 U. S. C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U. S. C. §6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P. L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records: (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
- 7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for, fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
- Will comply, as applicable, with provisions of the Haich Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds

Previous Edition Usable

Standard Form 4248 (Rev. 4/92) Prescribed by OM8 Circular A-102

Figure 3 Standard Form 424B (cont'd.)

- Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a 7), the Copeland Act (40 U.S.C. §§276c and 18 U. S. C. §§874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally assisted construction subagreements.
- 10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
- 11 Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (c) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 ct seq.); (f) conformity of Federal actions to State (Clear Air) Implementation Plans under Section 176(c) of the Clear Air Act of 1955, as amended (42 U.S.C. §§ 7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93-205).

- Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
- 13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. 469a-1 et seq.).
- 14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
- 15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. 2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
- 16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§ 4801 et seq.) which prohibits the use of lead based paint in construction or rehabilitation of residence structures.
- 17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act of 1984 or OMB Circular No. A-133, Audits of Institutions of Higher Learning and other Non-profit Institutions.
- 18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	TITLE		
APPLICANT ORGANIZATION	DATE SUBMITTED		

Standard Form 4248 (Rev. 4/92) back

Figure 4
Standard Form 424C

	BUDGE: NOTE: Certain Federal assistance programs require additional	T INFORMATIO	N — Constru	uction Pro ect costs eligible fi	grams or participation. If suc		Approval No. 0348-004
	COST CLASSIFICATION	a. Total Cost		b. Costs Not Allowable for Participation		c. Total Allowable Costs (Column a-b)	
1.	Administrative and legal expenses	\$.00	\$.00	\$.00
2.	Land, structures, rights-of-way, appraisals, etc.	\$.00	\$.00	\$.00
3.	Relocation expenses and payments	\$.00	\$.00	\$.00
4.	Architectural and engineering fees	s	.00	\$.00	\$	00
5.	Other architectural and engineering fees	\$.00	\$.00	\$.00
6.	Project inspection fees	\$.00	\$.00	\$.00
7.	Site work	\$.00	\$.00	\$.00
8.	Demolition and removal	\$.00	\$.00	\$.00
9.	Construction	\$.00	\$.00	\$.00
10.	Equipment	\$.00	\$.00	\$.00
11.	Miscellaneous	\$.00	\$.00	\$.00
12.	SUBTOTAL (sum of lines 1-11)	\$.00	\$.00	\$.00
13.	Contingencies	\$.00	\$.00	\$.00
14.	SUBTOTAL	\$.00	\$.00	\$.00
15.	Project (program) income	\$.00	\$.00	\$	00
16.	TOTAL PROJECT COSTS (subtract #15 from #14)	\$.00	\$.00	\$.00
		FEDERAL	FUNDING .				
17	Federal assistance requested, calculate as follows: (Consult Federal agency for Federal percentage share). Enter the resulting Federal share.	Enter eligible costs from line	16c Multiply X	%		\$.00

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Standard Form 424C (Rev. 4-92) Prescribed by OMB Circular A-102

Standard Form 424C (cont'd.)

INSTRUCTIONS FOR THE SF 424C

Public reporting burden for this collection of information is estimated to average 180 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0041), Washington, DC 20503.

PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET, SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

This sheet is to be used for the following types of applications: (1) "New" (means a new [previous unfunded] assistance, award); (2) "Continuation" (means funding in a succeeding budget period which stemmed from a prior agreement to fund); and (3) "Revised" (means any changes in the Federal government's financial obligations or contingent liability from an existing obligation). If there is no change in the award amount there is no need to complete this form. Certain Federal agencies may require only an explanatory letter to the effect minor (no cost) changes. If you have questions please contact the Federal agency.

Column a.—If this is an application for a "New" project, enter the total estimated cost of each of the items listed on lines 1 through 16 (as applicable) under "COST CLASSIFICATIONS."

If this application entails a change to an existing award, enter the eligible amounts approved under the previous award for the items under "COST CLASSIFICATION."

Column b.—If this is an application for a "New" project, enter that portion of the cost of each item in Column a, which is not allowable for Federal assistance. Contact the Federal agency for assistance in determining the allowability of specific costs.

If this application entails a change to an existing award, enter the adjustment [+ or (-)] to the previously approved costs (from column a.) reflected in this application.

Column c.—This is the net of lines 1 through 16 in columns "a." and "b."

Line 1—Enter estimated amounts needed to cover administrative expenses. Do not include costs which are related to the normal functions of government. Allowable legal costs are generally only those associated with the purchase of land which is allowable for Federal participation and certain services in support of construction of the project.

Line 2—Enter estimated site and right(s)-of-way acquisition costs (this includes purchase, lease, and/or easements).

Line 3—Enter estimated costs related to relocation advisory assistance, replacement housing, relocation payments to displaced persons and businesses, etc.

Line 4—Enter estimated basic engineering fees related to construction (this includes start-up services and preparation of project performance work plan).

Line 5—Enter estimated engineering costs, such as surveys, tests, soil borings, etc.

Line 6—Enter estimated engineering inspection costs.

Line 7—Enter estimated costs of site preparation and restoration which are not included in the basic construction contract.

Line 9—Enter estimated cost of the construction contract.

Line 10—Enter estimated cost of office, shop, laboratory, safety equipment, etc. to be used at the facility, if such costs are not included in the construction contract.

Line 11—Enter estimated miscellaneous costs.

Line 12—Total of items 1 though 11.

Line 13 —Enter estimated contingency costs. (Consult the Federal agency for the percentage of the estimated construction cost to use.)

Line 14-Enter the total of lines 12 and 13.

Line 15—Enter estimated program income to be earned during the grant period, e.g., salvaged materials, etc.

Line 16-Subtract line 15 from line 14.

Line 17—This block is for the computation of the Federal share. Multiply the total allowable project costs from line 16, column "c." by the Federal percentage share (this may be up to 100 percent; consult Federal agency for Federal percentage share) and enter the product on line 17.

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Grants Management Advisory Service

January 1994

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Standard Form 424D

OMB Approval No. 0348-0042

ASSURANCES — CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0042), Washington, DC 20503

PLEASE <u>DO NOT</u> RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET, SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the Awarding Agency. Further, certain Federal assistance awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notitied.

As the duly authorized representative of the applicant I certify that the applicant:

- Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of the project described in this application.
- 2. Will give the awarding agency, the Comptroller General of the United States, and if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
- 3. Will not dispose of, modify the use of, or change the terms of the real property title, or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the Federal interest in the title of real property in accordance with awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with Federal assistance funds to assure non-discrimination during the useful life of the project.
- Will comply with the requirements of the assistance awarding agency with regard to the drafting, review and approval of construction plans and specifications.
- 5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progress reports and such other information as may be required by the assistance awarding agency or State.
- Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
- Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.

- Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§ 4728-4763) relating to prescribed standards for merit systems for programs funded under one of the nineteen statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
- Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§ 4801 et seq.) which prohibits the use of lead based paint in construction or rehabilitation of residence structures.
- 10. Will comply with all Federal statues relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§ 1681-1683, and 1685-1686) which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794) which prohibits discrimination of the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§ 6101-6107) which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 93-255), as amended, relating to non-discrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§ 523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. 290 dd-3 and 290 ee-3). as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. § 3601 et seq.), as amended, relating to non-discrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made, and (j) the requirements on any other non-discrimination Statute(s) which may apply to the application.

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- 11. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provides for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal and federally assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
- 12. Will comply with the provisions of the Hatch Act (5 U.S.C. §§ 1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
- 13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§ 276a to 276a-7), the Copeland Act (40 U.S.C. § 276c and 18 U.S.C. § 874), the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327-333) regarding labor standards for federally assisted construction subagreements.
- 14. Will comply with the flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
- 15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the

- National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. § § 7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended, (P.L. 93-523); and (h) protection of endangered species under the Endangered Species Act of 1973, as amended, (P.L. 93-205).
- 16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§ 1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
- 17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. § § 470), EO 11593 (identification and preservation of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U. S.C.§ § 469a-1 et seq.).
- 18. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act of 1984.
- Will comply with all applicable requirements of all other Federal laws, Executive Orders, regulations and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	TITLE		
APPLICANT ORGANIZATION		DATE SUBMITTED	

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Attachment F List of Acronyms

ACOE U.S. Army Corp of Engineers

BOR U.S. Bureau of Reclamation

CEQA California Environmental Quality Act

CESA California Endangered Species Act

CVPIA Central Valley Project Improvement Act

DFG California Department of Fish & Game

EIR Environmental Impact Report

EIS Environmental Impact Statement

EPA Environmental Protection Agency

ERPP Ecosystem Restoration Program Plan

ESA Endangered Species Act (Federal)

FERC Federal Energy Regulatory Commission

FWS U.S. Fish & Wildlife Service

NEPA National Environmental Policy Act

NFWF National Fish & Wildlife Federation

NMFS National Marine Fisheries Service

NRCS National Resource Conservation Service

PFMC Pacific Fisheries Management Council



PSP Proposal Solicitation Package (1998)

QAPP Quality Assurance Project Plan

RFP Request for Proposal (1997)

SWRCB State Water Resources Control Board

USDA U.S. Department of Agriculture

Attachment G Conflict of Interest Rules for May 1998 PSP Technical Review Panels

You have been selected to serve on one of the Technical Review Panels for the May 1998 Proposal Solicitation Package (PSP). Your selection is based on your technical expertise, not on the institution or organization you represent. Every member of the Technical Review Panels is expected to be objective in the technical assessment of proposals and to set aside all institutional allegiances during the proposal review process.

To ensure objectivity and the integrity of the technical review process, CALFED has assigned you to a Technical Review Panel that, to the best of CALFED's knowledge, you do not have a direct, vested interest in as an individual. It remains possible, however, that the Technical Review Panel to which you have been assigned will review a proposal with which you have an institutional connection. An institutional connection exists between employees and their employers. For example, an employee of a state or federal agency will have an institutional connection with a proposal submitted by that agency, even if the applicant is in a different division of the agency than the Technical Review Panel member.

At the beginning of discussions on a proposal, you must determine whether you have an institutional connection with any of the applicants for a particular proposal. If you believe you have an institutional connection with any of the applicants, you must:

- 1. Reveal the institutional connection you have with any applicant to the remaining members of the Technical Review Panel;
- 2. Recuse yourself from discussing *and* scoring the proposal.

If you recuse yourself from considering a proposal, you must leave the room until the remaining Technical Review Panel members have completed discussing and scoring the proposal. You must refrain from answering questions or making any comments on the proposal for which you have an institutional connection. Failure to recuse yourself from discussing and scoring a proposal for which you have an institutional connection may result in the proposal being disqualified.



Attachment H

COVER SHEET (PAGE 1 of 2)

May 1998 CALFED ECOSYSTEM RESTORATION PROPOSAL SOLICITATION

Pro	posal Title:					
App	olicant Name:					
Mailing Address:						
Fax	••					
Am	ount of funding requested: \$		_ for years			
	icate the Topic for which you are applying page of the Proposal Solicitation Packa		ck only one box). Note that this is an important decision more information.			
	Fish Passage Assessment		Fish Passage Improvements			
	Floodplain and Habitat Restoration		Gravel Restoration			
	Fish Harvest		Species Life History Studies			
	Watershed Planning/Implementation		Education			
	☐ Fish Screen Evaluations - Alternatives and Biological Priorities					
Ind	icate the geographic area of your proposal	(chec	•			
	Sacramento River Mainstem		Sacramento Tributary:			
	Delta		East Side Delta Tributary:			
	Suisun Marsh and Bay		San Joaquin Tributary:			
	San Joaquin River Mainstem		Other:			
	Landscape (entire Bay-Delta watershed)		North Bay:			
Ind	icate the primary species which the propos		·			
	San Joaquin and East-side Delta tributario	es fall	-run chinook salmon			
	Winter-run chinook salmon		Spring-run chinook salmon			
	Late-fall run chinook salmon		Fall-run chinook salmon			
	Delta smelt		Longfin smelt			
	Splittail		Steelhead trout			
	Green sturgeon		Striped bass			
	Migratory birds					

CALFED BAY-DELTA PROGRAM

COVER SHEET (PAGE 2 of 2)

May 1998 CALFED ECOSYSTEM RESTORATION PROPOSAL SOLICITATION

Ind	cate the type of applicant (check only one	box):	
	State agency		Federal agency
	Public/Non-profit joint venture		Non-profit
	Local government/district		Private party
	University		Other:
Indi	cate the type of project (check only one b	ox):	
	Planning		Implementation
	Monitoring		Education
	Research		
Ву	signing below, the applicant declares the f	follow	ing:
(1)	the truthfulness of all representations in t	their p	roposal;
	the individual signing the form is entitled licant is an entity or organization); and	l to su	bmit the application on behalf of the applicant (if
disc	. •	es any	and understood the conflict of interest and confidentiality and all rights to privacy and confidentiality of the provided in the Section.
— (Sig	nature of Applicant)		

CALFED BAY-DELTA PROGRAM

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